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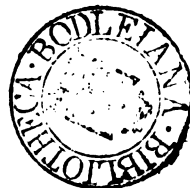




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**STATISTICAL REPORT**  
**ON THE**  
**SICKNESS, MORTALITY, & INVALIDING**  
**AMONG THE TROOPS**  
**IN**  
**THE WEST INDIES.**

**PREPARED FROM THE RECORDS OF THE ARMY MEDICAL DEPARTMENT  
AND WAR-OFFICE RETURNS.**



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**Presented to both Houses of Parliament by Command of Her Majesty.**

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**1838.**

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## INTRODUCTION.

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IN submitting this Report, it may be necessary to enter into a short detail of the circumstances under which the information was called for, and of the sources whence it has been derived ; its importance, both in a military and medical point of view, being sufficiently evident to obviate the necessity for any remarks on that head.

In October 1835, the Secretary at War deemed it requisite that an inquiry should be instituted into the extent and causes of the sickness and mortality among the troops in the West Indies, with the view of founding thereon such measures as might appear likely to diminish the great loss of life annually experienced in these Colonies. At this period there existed no public document which could at once supply that information for a series of years, and though the number of deaths might have been ascertained by a compilation from the War Office Returns, that fact, unaccompanied by a detail of the diseases, as well as the extent of sickness which prevailed, would have afforded a very inadequate idea of the magnitude of the evil, or the causes by which it was induced.

Under these circumstances, it became necessary to refer to a very voluminous series of Returns and Reports, containing an Historical Record of the Medical Transactions in the British Army since 1816, when first established by Sir James M'Grigor, the Director General ; but as these documents extended over upwards of 160 folio volumes, and had been accumulating at the Army Medical Board for a period of twenty years\*, it became necessary that the investigation should be committed to persons who were conversant with statistical details, and had been in the habit of condensing the results derivable from masses of figures into a succinct and comprehensive form.

For this duty Mr. Henry Marshall, Deputy Inspector General of Hospitals, and myself, were nominated by the Secretary at War, on the recommendation of the Director General. For the honour of this selection we were, I believe, principally indebted to the circumstance of our having been previously engaged in publications showing the extent of mortality among the troops in the Colonies, collected from such limited sources of information as were within our reach.

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\* The expediency of framing a digest of these documents, for the advancement of medical science, had frequently been suggested by the Director-General, though the reduced establishment of his department did not admit of its being carried into effect. Independent of the materials which have been made available in this Report, these documents contain a vast mass of information relative to the treatment and medical history of the diseases incident to the Colonies, which must prove of great utility to the medical profession in all questions connected with that interesting topic.



The documents submitted for our investigation, and which we were desired to take as the basis of our Report, consisted principally of a series of Returns furnished annually by every medical officer in charge of troops on foreign stations, to the principal medical officer of the Colony in which he serves, detailing the number of troops under his charge, with the admissions into hospital and deaths among them, in the course of the year, and a specification of the diseases by which they were occasioned. The contents of these are then condensed by the principal medical officer into one general Return, embracing the sanitary details of the whole troops in the Colony, which is transmitted to the Medical Department, where it forms a record of the state of their health for that year.

So far as regards the number of admissions into hospital, or attacks of sickness, these documents are a very accurate record, because every soldier taken into hospital being forthwith subject to a stoppage of tenpence per day, the entries made by the surgeon to regulate the financial details of his department, afford a ready means of checking his Returns. The same cause, however, which tends to ensure accuracy in the admissions, proves a considerable source of error in the deaths, for if a soldier dies so suddenly as not to have been dieted in hospital, his death, in many instances, is omitted altogether by the medical officer. The mode in which this defect has been remedied by reference to the documents in the War Office, will be hereafter detailed.

Besides these particulars, the Annual Returns afford information on other interesting topics. Since 1818, the diseases of the officers, women, and children have been stated separately, which has afforded the means of showing whether all classes are affected by the climate in an equal degree. The admissions and deaths by acute, chronic, and surgical diseases in every month, as well as the range of temperature, fall of rain, and state of the weather during the same period, have also in many instances been recorded, and have furnished data for estimating the influence of the seasons on the health of troops, and how far it may have been affected by these atmospherical agencies.

These Annual Returns have generally been accompanied by a Report on the causes by which it was supposed the health of the troops had been affected, their diet, duty, and employment, the state of the barrack and hospital accommodation, the topography of the station, the nature of the soil, the climate, the productions of the colony, &c. From this source the observations on these topics in the accompanying Report have principally been compiled.

As these Annual Returns, otherwise so complete in their details, did not distinguish between the diseases of the White and Black Troops, which we had been instructed to investigate separately, it became necessary for that purpose to refer to the Medical Quarterly Returns; but this involved the necessity of first condensing them into Annual Returns for each station, which added very materially to the labour and time occupied in the investigation.

From these sources of information, a Report was prepared by Mr. Marshall and myself, showing the sickness, mortality, and prevailing diseases among the troops in the West Indies, from 1817 to 1834. On this Report being submitted to the Secretary at War in May 1836, he directed the investigation to be extended to the Returns from each foreign station forwarded monthly to the War Office, by

which the deaths omitted in the Medical Returns might be supplied, and the average number constantly sick ascertained. He also directed an inquiry to be made into the influence of age and length of residence on mortality in tropical climates, by means of the Returns of age and service which had been established in 1830 for this purpose, and that similar investigations should be carried on with regard to the troops in all the Colonies.

When an opportunity was thus afforded of rendering the Report so complete, the marked difference which had been observed in the course of the investigation, between the salubrity of different stations, though in the immediate vicinity of each other, also suggested the necessity for a more minute inquiry into the nature of the localities where the troops were posted, with the view of ascertaining to what agency that difference might be attributable. This ultimately led to the preparation of the topographical descriptions now prefixed to the details of each station, which were carefully compiled from the Medical Records, and such other sources of information as were attainable. In the meantime the Returns for 1835 and 1836 were received, which enabled me to complete the results for a period of twenty years.

In carrying on this extended investigation, however, I was deprived of the personal superintendence of Mr. Marshall, who left London in June 1836; but though the task of extracting and reducing into shape the mass of materials necessary for the completion of these labours has thus devolved upon me, I have constantly had the advantage of his revision, and on all medical points involved in these details, of his assistance and advice.\*

In the brief description of the localities and climate at each station, prefixed to the details of the sickness and mortality there, due allowance will no doubt be made by those who have had the advantage of residence on the spot, for the difficulty attending a compilation from statements made by so many different individuals, and extending over so long a series of years. No pains have been spared to ensure accuracy by consulting every authority from which information could be procured, and it is hoped that important object has, in most instances, been attained.

In a Report framed to exhibit a condensed view of the labours of others, it is customary to acknowledge the author's obligations to those from whom his information has been derived; to have done so on the present occasion, however, would have involved the necessity of enumerating nearly all the medical officers who have served in the West Indies during the last twenty years; for where each has contributed to the best of his ability, or the extent of his experience, it might appear invidious, if not presumptuous in me, to single out some as in this respect more deserving of testimony than others. I can only, therefore, express my obligations generally to the members of that profession, for the valuable information obtained through their medium, as well as my sense of the intelligence with which the system of Returns has been organized in the Medical Department, so as to admit of the results for so long a period being condensed in their present form.

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\* On the departure of Mr. Marshall, the Director General kindly permitted me to avail myself of the services of Assistant Surgeon Balfour, of the Medical Staff at Chatham, whose assiduity and intelligence in the collection and arrangement of the materials, has tended much to facilitate the progress of this investigation.

It will be observed that this Report is principally confined to such points as can readily be solved by the test of facts and figures. Observations as to treatment, speculations regarding the contagious or non-contagious nature of particular diseases, or any reference to medical theories except where they can be made the subject of calculation, would obviously be quite foreign to the purpose of a Statistical Report. The main object kept in view has been merely to determine the extent of sickness and mortality at each station, the diseases by which it has been induced, and such causes of these diseases as appear sufficiently obvious or tangible to admit of remedy.

ALEXANDER M. TULLOCH

*Captain 45th Regiment.*

*War Office, 23d May, 1838.*

## SECTION I.

### I. *On the Sickness and Mortality among Troops in the West Indies.*

THE Troops employed in garrisoning the British Possessions in the West Indies form several Military Commands, of which it is proposed to investigate the statistical details in the following order :—

- I. The Windward and Leeward Command,
- II. The Jamaica Command,
- III. The Bahamas, and
- IV. The Honduras Command.

#### I.—THE WINDWARD AND LEEWARD COMMAND.

THE troops in this Military Command are employed in garrisoning various islands and possessions extending from 6° to 17° north latitude, and 56° to 63° west longitude, and including that portion of the American continent termed British Guiana, with the islands of Trinidad, Tobago, Grenada, St. Vincent's, Barbadoes, St. Lucia, Dominica, Antigua with Montserrat, and St. Kitt's with Nevis and Tortola.

These islands form a portion of that chain which stretches across the great gulf separating North from South America, but many of them differ so materially in physical aspect, local peculiarities, and other circumstances by which the health of troops are likely to be affected, that it would be vain to attempt any description sufficiently comprehensive to be applicable to the whole. Trinidad, Tobago, St. Lucia, and Dominica, for instance, are extremely mountainous, covered with dense forests, and intersected by deep and narrow ravines, impervious to the breeze, and in which the rain water, finding no vent, stagnates among a mass of decayed vegetation, creating a moist soil, with a damp climate and variable temperature; whereas Antigua and Barbadoes are comparatively low, barren, and rocky, with a scanty soil, but little exuberant vegetation, a dry climate, and equable temperature. The other islands possess a kind of intermediate character in these respects; while the coast of British Guiana is totally different from either, being an immense tract of level country, covered with forest, elevated only a few feet above the level of the sea, and, during the rainy season, presenting an almost endless succession of swamps and marshes, with an atmosphere exceedingly humid, though not so variable in temperature as some of the islands first referred to.

As a knowledge of those peculiarities which are likely to have affected the health of the different garrisons in this Command is essential to an investigation of this nature, there will be found in a subsequent portion of the Report, a brief description of each settlement, and of the localities where the troops are posted. We shall, therefore, at present confine ourselves to a few general remarks on the leading characteristics which distinguish the climate of these regions from that of temperate latitudes, the description of force employed, the nature of their duties, and the principles on which the barrack accommodation, rations, and diet, have been generally regulated throughout the Command.

1st. The first peculiarity which distinguishes the climate of this Command is a high temperature, a necessary consequence of proximity to the equator. The mean height of the thermometer throughout the year is, however, rather under than above the average of similar latitudes, being only about 80½°. In none of the islands is it above 82° or under 79°, and any slight difference in this respect results more from their geological features, or extent of cultivation, than the mere difference of latitude; as the mean temperature of British Guiana in latitude 6°, is but 80½°, while that of St. Kitt's, more than 12 degrees further to the north, is 81°.

2d. The next peculiarity which extends to this, as well as most tropical regions, particularly of insular situation, is great uniformity of temperature. The difference between the highest and lowest mean range of the thermometer, is, even in the most variable of the islands, only 13°, and in some it is not more than 4° throughout the year; whereas in Britain it is, in most years, upwards of 30°.

3d. In this, as well as other tropical climates, there is but little change in the elasticity or pressure of the atmosphere. The extreme range of the barometer is not more than from a quarter to half an inch throughout the year, and it is not materially affected even by hurricanes; whereas in this country its range is from two to three inches, and it varies with every slight change of weather.

4th. One of the most marked of the atmospherical peculiarities of these regions, is the large quantity of rain which falls annually, being, on the average, at least three times as much as in Britain—a necessary consequence of rapid evaporation under a tropical sun. The quantity, however, varies materially in the different colonies, according as their surface is mountainous or level, clothed in wood, or cleared and under cultivation. We have, in a subsequent portion of this Report, stated the fall of rain in each colony, so far as it has been ascertained by measurement; the average quantity throughout the whole Command has been estimated at from 60 to 70 inches annually.

The rain of these regions is, however, of a very different character from that of Britain, being confined principally to two seasons of the year, termed the spring and autumnal rains, and

I.  
*Windward and  
Leeward Command.*

General Description.

Climatic Peculiarities.

Temperature.

Rain.

Seasons.

then falling, not in gentle showers, but in torrents, which, unless in a very dry soil, or where there is free drainage, speedily inundate the surrounding country.

5th. The four seasons of temperate climates are therefore represented by two wet, and two dry seasons; but as the rains follow the course of the sun, it is obvious that the period of their commencement and duration must vary according to the proximity of the settlements to the equator. In Guiana, the most southerly, the spring rains generally extend from December to January, the autumnal from May to August, while in the most northerly of these settlements, the former does not commence till April or May, and the latter extends from October to December.

In many of the islands, particularly the less hilly ones, there is scarcely any deposition of dew, and in the others it is generally scanty, except in densely wooded districts.

Prevailing Winds.

6th. In regions exposed to such a high temperature it is fortunate that the heat of the day is generally modified by a sea-breeze, not of that variable character which prevails in temperate climates, but which blows with nearly uniform force, and from one direction, during nine months in the year. It is termed the Trade Wind, and generally comes from the east and its collateral points, except from August to December, when it veers round, and blows slightly from the south and west, with frequent calms at intervals.

While this trade wind prevails during the day, a land wind, in all the large and mountainous islands, blows with almost equal regularity at night; for as soon as the sea-breeze dies away, the hot and rarified air of the plains, ascending to the mountain tops, is there condensed by the cold, and flows in a steady current towards the ocean, to supply the equilibrium of the atmosphere. In the smaller islands, and those in which there are no mountains, there is either no land wind, or it is very slight. The sea-breeze generally sets in between 10 and 11 A.M., blows with increasing force till 3 P.M., and dies away about sunset, when, after a short interval, the land wind commences, and continues till sunrise.

Hurricanes.

In these and some other tropical regions in similar latitudes, hurricanes are occasionally experienced between the month of August and latter end of October, hence denominated the hurricane season. Trinidad, Tobago, and the settlements to the south, have hitherto been exempt from them, but they sometimes fall with dreadful violence on the other islands. Barbadoes, in particular, has suffered very severely from their ravages.

Electrical Phenomena.

During the rains, particularly at their commencement and termination, thunder and lightning are very common, but seldom occur at any other period of the year. Unfortunately little has been done to investigate the electrical condition of the atmosphere in these parts of the world, and therefore we can only estimate the presence of that agency from its visible effects at these periods.

Troops employed.

Such are the general peculiarities of the climate of this Command. We shall now give a few details regarding the troops employed there. These have consisted of the service companies of several regiments of the line, about four companies of artillery, one West India regiment composed of negroes, and a body of military labourers of the same race, who are attached to the Quartermaster-General's Department, and though included in the Medical Returns along with the black soldiers, are, we believe, not drilled or armed. The force of black troops was, at one time, much larger than at present. During the last war it was as high as 5900 men, but from 1816 it has been gradually reduced to its present amount.

Duty and Employment.

The white troops have, during the last 20 years, been employed merely in the ordinary routine of garrison and regimental duty. The limited extent of each island renders it unnecessary to subject them to any long or fatiguing marches, and, except during occasional insurrectionary movements among the negroes in Guiana, St. Lucia, and some of the smaller islands, which for a short time obliged them to take the field, they have had no duty to perform of a severe or harassing nature. The military labourers are generally employed on the public works and heavy fatigue duties, and the black troops take such of the guards as are most likely to prove prejudicial to the health of the whites.

Barrack and Hospital Accommodation.

As a brief detail of the barracks and hospitals at each station is given in a subsequent portion of this Report, it will only be necessary here to explain the principles on which that accommodation has been allotted to the troops in this Command, and the condition of the buildings at different periods included in this Report.

So far as we can learn, the extent of barrack accommodation to the soldiers serving in this Command did not, prior to 1827, exceed from 22 to 23 inches in breadth to each, and as that would not admit of their having bedsteads, they slept in hammocks, by which expedient as many men could be placed in one apartment as the breadth of their bodies would admit. This arrangement will readily be comprehended by the following details of the barrack accommodation at Tobago, in 1826, at that time said to be the best in the whole Command:—

	Dimensions of Barrack Room.			Scale of accommodation with Hammocks prior to 1827.		
	Length.	Breadth.	Estimated Height.	Number of Men quartered in each.	Breadth allowed each.	Cubic Feet of space allowed each Man.
	Ft. in.	Ft. in.	Feet.		Inches.	Feet.
1st Barrack . . .	28 0	20 10	12	30	22½	234
2d " . . .	113 3	26 0	12	114	23½	311
3d " . . .	32 0	30 0	12	30	25½	256
4th " . . .	96 0	23 0	12	106	22	250
5th " . . .	58 5	18 5	12	64	21½	200

About the year 1827 a great increase was made to the extent of barrack accommodation, in consequence of the introduction of iron bedsteads for the troops, which rendered it necessary to extend the breadth allowed each man to 3 feet 3 inches, in order to admit of a free passage between them; and thus the same extent of accommodation at Tobago, which under the hammock system was deemed sufficient for 344 men, was, after this period, divided among 222, affording to each from 350 to 400 cubic feet of space, which, we believe, to have since continued about the average to each soldier in the barracks of this Command.

In regard to the condition of the barracks and hospitals it is necessary to remark, that during the earlier years included in this Report many of them were reported to be in a state of great disrepair and dilapidation; but of late, particularly since 1830, numerous improvements have taken place, and complaints on that head have become comparatively rare. We have been thus particular in our remarks on this subject, in order to elucidate any subsequent observations as to the effect which the state of these buildings may have had on the mortality of the troops.

The rations of the troops in the Windward and Leeward Command during the period embraced in this Report have consisted weekly of 7lbs. of bread, 2lbs. of fresh meat, 2lbs. of salt beef, 27 ounces of salt pork, 9 ounces of sugar, 10 ounces of rice, 5 ounces of cocoa, and 2½ pints of peas, for which the soldier pays 5d. Prior to 1830 he was also allowed a gill of rum, for which he was charged 1d. In most of the corps the soldier has but two meals; breakfast, consisting of a pint of cocoa and his ration bread, and dinner, consisting either of the fresh meat made into broth, with vegetables, or the salt meat boiled into soup, with the peas, and eaten with yams or potatoes. In some instances there is also a supper meal, but this is not common in the Command.

Having illustrated thus minutely every particular likely to have affected the health of the troops in this Command, we shall proceed to detail the extent of sickness and mortality among them; but as the black troops are so much less susceptible of the diseases of this climate than the whites, the details relative to that force will be considered separately. The following Table of the admissions into hospital, and deaths during the last 20 years, therefore refers to the white troops only:—

Years.	Strength.	Admissions.	Deaths.	Ratio per Thousand of Mean Strength.	
				Admitted.	Died.
1817	5,120	12,111	830	2,365	162
1818	4,203	8,490	532	2,020	126
1819	3,790	6,949	314	1,833	83
1820	3,672	7,463	387	2,032	105
1821	3,639	7,660	397	2,104	109
1822	3,299	6,036	254	1,830	77
1823	3,264	6,072	158	1,860	49
1824	4,144	8,534	293	2,060	70
1825	4,466	7,906	343	1,770	76
1826	4,549	7,855	308	1,727	68
1827	4,310	8,251	365	1,914	85
1828	4,202	8,071	341	1,921	81
1829	4,164	7,459	241	1,791	58
1830	4,601	9,290	300	2,020	65
1831	4,232	9,927	293	2,346	69
1832	4,331	7,823	277	1,806	64
1833	4,823	9,018	241	1,869	50
1834	5,407	8,249	233	1,526	43
1835	5,462	8,259	313	1,512	57
1836	4,983	9,512	383	1,909	77
Total	86,661	164,935	6,803	..	..
Average	4,333	8,247	340	1,903	78.5

Table I.  
Showing the Admissions into Hospital, and the Deaths among the White Troops in the Windward and Leeward Command.

From this it appears that among every 1000 white troops there have been 1903 admissions into hospital in the course of the year, so that on the average every man must have been under medical treatment, for some cause or other, about once every six months and a half.

If reference be made to the proportion of admissions among troops in the United Kingdom, it will be found that there every man is under treatment about once every thirteen months; consequently the cases of sickness or admissions into hospital among white troops in this Command are about twice as numerous as when serving in their native country. There is, however, this marked distinction, that they are of so severe a character, that 1 in 24 proves fatal, whereas in this country only 1 death occurs out of every 67 cases treated.

Before bringing the mortality among the white troops in this Command, however, into comparison with that of the same class in the United Kingdom, it may be necessary to remark that the deaths stated in the preceding table are only those which have occurred under medical treatment, or after being admitted into hospital, leaving still to be accounted for a considerable

proportion who die suddenly, or from accidental causes.\* The only means we have of ascertaining the number of these, is by a comparison of the deaths in the preceding table with those reported annually to the War Office by the General Officers in this Command, and which include the deaths from all causes.

	1817	1818	1819	1820	1821	1822	1823	1824	1825	1826	1827	1828	1829	1830	1831	1832	1833	1834	1835	1836	Total.
Deaths per War-Office Returns	909	487	316	358	427	223	163	309	365	315	380	344	261	314	333	304	278	249	332	403	7,069
Deaths per Medical Returns	830	532	314	387	397	254	158	293	343	308	365	341	241	300	293	277	241	233	313	383	6,803
Difference understated in Medical Returns																					266

This omission, added to the ratio of deaths in the preceding table, increases it to 81½ per thousand, to which must be added invalids who died at sea, or on their passage homeward; these have averaged about 14 annually, or 3½ per thousand, thus making the mortality from all causes 85 per thousand of the mean strength.

This would be a fair estimate of the ratio of mortality among this class of troops during the last 20 years, provided the strength in the Medical Returns had been accurately stated. But as this has, in most instances, been taken at the highest rate to which it attained in the course of the year, and not on the mean of each month, as it ought to have been, we find, by a comparison with the War Office Returns, that the strength has in this way been rated, by the medical authorities, about a tenth part higher than it ought to have been; consequently the above ratio of mortality must be increased in a corresponding proportion, which will make it 93½ per thousand of the strength, or, in other words, about an eleventh part of the force have died annually.

From this statement, however, no definite idea can be conveyed of the insalubrity of the climate, till we compare it with the mortality which has taken place among the same class of troops in the United Kingdom. This has amounted, during a long series of years, to about 15 per thousand annually; but, during the last 7 years, it has, owing to the prevalence of influenza and cholera, been about 2 per thousand higher. Thus the mortality among troops in the Windward and Leeward Command has been six times as high as in the United Kingdom, though the extent of sickness, as shown by the number of admissions into hospital, has only been twice as great. Even this rate of mortality, high as it appears, is considerably less than during the previous 14 years, from 1803 to 1816, when it was as follows:

Years.	1803	1804	1805	1806	1807	1808	1809	1810	1811	1812	1813	1814	1815	1816	Total.	Average.
Strength . .	8,501	6,849	6,467	7,044	6,604	7,814	7,000	6,046	5,502	6,152	7,292	6,673	6,641	6,153	94,738	6,767
Deaths . .	993	1,706	1,790	800	846	1,138	695	1,015	804	609	529	493	639	969	13,028	931
Ratio of Deaths per 1000 of Strength . .	117	249	277	114	128	146	99	168	146	99	73	74	96	157	. .	138

Thus, during this period 138 per thousand of the white troops in this Command died annually, which is about one-half more than on the average of the last 20 years; so that fatal as the climate still is to European troops, it appears of late years to have materially improved, particularly in Barbadoes, Trinidad, and Antigua. In this estimate we have carefully excluded the strength and deaths of the troops serving in the settlements of Surinam, Martinique, Guadaloupe, St. Eustatia, St. Martin's, Santa Cruz, and St. Thomas, which were given up by the British in 1814 and 1815, as a greater mortality occurred in these settlements, than in the others which now constitute the Windward and Leeward Command.

The extent of sickness and mortality during the last 20 years being determined, the next question is, by what diseases was it produced? With regard to those deaths not included in the Medical Returns we can supply no specific details; but in Abstract No. I. of Appendix, every disease by which either a death or an admission into hospital has been caused during that period, will be found as annually reported by the medical authorities in this Command; and to exhibit the results in as comprehensive a form as possible, they have been arranged in classes, in the following Table:—

\* In a few of the years, particularly of late, the deaths from accidents, violence, &c., are enumerated by the medical officers; but in others, no mention is made of them, consequently from the want of a uniform system, this portion of the information cannot be made available.

Table II.  
Showing the principal Diseases  
among White  
Troops in the  
Windward and  
Leeward Command.

	Admissions.		Deaths.	
	Total among whole Force in 20 Years.	Annual Ratio per 1000 of Mean Strength.	Total among whole Force in 20 Years.	Annual Ratio per 1000 of Mean Strength.
Fevers . . . . .	62,163	717	3,195	36.9
Eruptive Fevers . . . . .	13	$\frac{2}{10}$	1	..
Diseases of the Lungs . . . . .	9,975	115	906	10.4
" of the Liver . . . . .	1,946	22	161	1.8
" of the Stomach and Bowels . . . . .	36,474	421	1,795	20.7
" of the Brain . . . . .	2,447	28	312	3.7
Dropsies . . . . .	659	$7\frac{8}{10}$	180	2.1
Rheumatic Affections . . . . .	4,202	49	17	2.9
Veneral " . . . . .	3,043	35	6	
Abscesses and Ulcers . . . . .	17,708	204	18	
Wounds and Injuries . . . . .	11,149	129	60	
Punished . . . . .	4,327	50	2	
Diseases of the Eyes . . . . .	7,686	89	4	2.9
" of the Skin . . . . .	559	6	1	
All other Diseases . . . . .	2,584	30	145	
Total . . . . .	164,935	1,903	6,803	78.5

These results we shall now proceed to illustrate by a few remarks in regard to the principal classes of diseases contained in the above Table.

## FEVERS.

Under this head are comprised in the preceding Table—

	Admitted.	Died.	Proportion of Deaths to Admissions.
Quotidian Intermittent Fevers* . . . . .	24,607	149	1 in 165
Tertian . . . . .	1,973	11	1 in 179
Quartan . . . . .	133	1	1 in 133
Remittent . . . . .	17,799	1,966	1 in 9
Common, continued . . . . .	16,821	726	1 in 23
Yellow Fever ( <i>Icterodes</i> ) . . . . .	774	331	1 in 24
Typhus . . . . .	48	11	1 in 44
Synochus . . . . .	8	..	0 in 8
Total . . . . .	62,163	3,195	1 in 20
Annual Ratio per 1000 of Mean Strength . . . . .	717	36.9	..

This class of diseases is the principal source of sickness and mortality in this Command; as it comprises considerably more than a third of all the admissions, and about a half of all the deaths. Compared with the same diseases among troops in this country, the admissions are ten times, and the deaths twenty-five times as numerous.

About two-fifths of the above admissions are from intermittent fever, which seldom proves fatal to those attacked; but this disease is principally confined to the low, marshy settlements of Demerara and Berbice, where it has been a very great source of inefficiency, particularly since 1830, the number attacked in the course of the year having been often equal to the whole force in the colony. Intermittents are also very common in Trinidad, owing to the vicinity of the barracks to the marshes; but in the other stations they are comparatively rare, and in some almost unknown.

A very arbitrary distinction seems to prevail in regard to the insertion of cases under the head of yellow fever (*febris icterodes*), only one having been recorded in the Medical Returns since 1827; but as different opinions are entertained by medical officers in regard to the classification of fevers, that which has been entered at one time as yellow fever may probably have been denominated remittent at another. The cases reported as *icterodes* must have been exceedingly fatal, as about one-half died of all attacked; whereas of those attacked by remittent fever, which may perhaps be viewed as a less aggravated form of the same disease, a ninth part only died. These malignant fevers have of late years been principally confined to Tobago, St. Lucia, Dominica, and Guiana. Some very severe cases appeared lately also at St. Kitt's and Tortola.

Fevers of the common continued type are about equally prevalent and fatal throughout all the stations in the Command, except at St. Lucia and St. Kitt's, where they seem to have been particularly virulent in their character. The proportion who die out of those attacked by that description of fever throughout this Command is 1 in 23, whereas among troops in the

\* A considerable proportion of the fevers classed as quotidian may probably have been tertian or quartan, as the returns are not always very specific on this head.



United Kingdom it is but 1 in 78, so that it must be of a much more severe character than in this country.

Eruptive fevers have been so exceedingly rare in the Windward and Leeward Command, that only 13 have been attacked, and but 1 died among the whole force of white troops in the space of 20 years.

### DISEASES OF THE LUNGS.

Under this head are comprised in the preceding Table—

	Admitted.	Died.	Proportion of Deaths to Admissions.
Inflammation of the Lungs . . . . .	1,941	112	1 in 17
Pleurisy . . . . .	34	1	1 in 34
Spitting of Blood . . . . .	303	34	1 in 9
Consumption . . . . .	1,023	580	1 in 2
Acute Catarrh . . . . .	5,108	49	1 in 104
Chronic Catarrh . . . . .	1,409	127	1 in 11
Asthma . . . . .	92	2	1 in 46
Difficulty of Breathing . . . . .	63	1	1 in 63
Hooping Cough . . . . .	2	..	..
Total . . . . .	9,975	906	1 in 11
Annual Ratio per 1000 of Mean Strength . . . . .	115	10.4	..

Though the proportion of admissions by this class of diseases is lower than among troops in the United Kingdom, in the proportion of 115 to 148, the ratio of mortality is much higher, as nearly 10½ per thousand of the strength have been cut off annually; whereas in Britain the deaths from the same class of diseases do not average, at the utmost, more than 8½ per thousand. This arises from the greater prevalence of consumption, for out of an aggregate strength of 86,661, serving in the Windward and Leeward Command, not fewer than 1023 were attacked by that fatal disease, being 12 per thousand annually, while out of an aggregate strength of 44,611 dragoon guards and dragoons serving in Great Britain, only 286 were attacked, being about 5½ per thousand.

Not only is consumption productive of great mortality in this Command, but inflammation of the lungs and chronic catarrh are nearly twice as prevalent and twice as fatal as among troops in Britain, thus showing how little effect a mere increase of temperature has in modifying these diseases. The only disease of this class from which the troops in this Command appear for some years to have enjoyed any exemption is acute catarrh; but there has been a remarkable increase in the cases since 1823 and 1824, and of late years at least four times as many have been attacked by it as previous to that period.

### DISEASES OF THE LIVER.

Under this head are comprised in the preceding Table—

	Admitted.	Died.	Proportion of Deaths to Admissions.
Acute Inflammation of the Liver . .	903	79	1 in 11
Chronic " . . . . .	902	76	1 in 12
Jaundice . . . . .	141	6	1 in 23
Total . . . . .	1,946	161	1 in 12
Annual Ratio per 1000 of Mean Strength . . . . .	22	1.8	..

Though this class of diseases is by no means so common as in the tropical regions of the Eastern hemisphere, it is nearly thrice as prevalent as among troops in the United Kingdom, and occasions about five times as high a ratio of mortality. It varies materially, both in prevalence and severity, at different stations. At Grenada, for instance, it will be found to have occasioned three times as much mortality as at most of the other islands, and without any assignable cause.

## DISEASES OF THE STOMACH AND BOWELS.

Under this head are comprised in the preceding Table—

	Admitted.	Died.	Proportion of Deaths to Admissions.
Abdominal Inflammation . . . . .	25	7	1 in 3½
Inflammation of the Stomach . . . . .	161	26	1 in 6
"          Bowels . . . . .	254	38	1 in 7
Vomiting of Blood . . . . .	34	2	1 in 17
Acute Dysentery . . . . .	14,076	608	1 in 23
Chronic " . . . . .	3,767	759	1 in 5
Indigestion . . . . .	1,142	27	1 in 42
Colic . . . . .	3,286	15	1 in 219
Obstipation . . . . .	727	3	1 in 242
Cholera . . . . .	1,173	24	1 in 49
Diarrhœa . . . . .	11,828	285	1 in 42
Cancer of Stomach . . . . .	1	1	1 in 1
Total . . . . .	36,474	1,795	1 in 20½
Annual Ratio per 1,000 of Mean Strength . . . . .	421	20·7	..

This class of diseases is a most fertile source of sickness and mortality among the white troops, the proportion attacked annually amounting to 421 per thousand; whereas among troops in Britain it is only about 95 per thousand of the strength, and the diseases are of so mild a character that not above one death is caused by them in every two thousand of the strength. In this Command they occasion a mortality of about 21 per thousand, being upwards of 40 times as high a ratio as among troops at home.

The principal source of this mortality is chronic dysentery, of which one case in five proves fatal, and unfortunately a very great proportion of the cases of acute dysentery and diarrhœa, however slight in the commencement, by frequent recurrence ultimately terminate in this form of the disease. Every time the patient is admitted into hospital it assumes a more intense and unmanageable character, till, after several partial recoveries and relapses, he ultimately sinks under it.

Inflammation of the stomach and bowels, and indeed every disease of this class, prove also extremely severe in character, and fatal in their effects. There is, however, a very considerable difference in their influence in one island or settlement as compared with another, which will be hereafter more fully illustrated, when we come to investigate the mortality which has occurred in each separately.

There have been no cases of epidemic cholera among the troops in this Command during the period over which our Report extends.

## DISEASES OF THE BRAIN.

Under this class are comprised in the preceding Table—

	Admitted.	Died.	Proportion of Deaths to Admissions.
Inflammation of the Brain . . . . .	108	8	1 in 13½
Headache . . . . .	127	1	1 in 127
Stroke of the Sun . . . . .	6	..	0 in 6
Water in the Head . . . . .	3	2	1 in 1½
Apoplexy . . . . .	159	83	1 in 2
Paralysis . . . . .	106	10	1 in 10½
Epilepsy . . . . .	325	22	1 in 15
Fatuity . . . . .	83	5	1 in 16½
Madness . . . . .	104	6	1 in 17½
Brain Fever of Drunkards . . . . .	1,426	175	1 in 8
Total . . . . .	2,447	312	1 in 8
Annual Ratio per 1,000 of Mean Strength . . . . .	28	3·7	..

It would at first sight appear that this class of diseases is exceedingly prevalent and fatal, the admissions and deaths being about four times as high as among the same number of troops in Great Britain; but considerably more than half of them have arisen from *delirium tremens*, the direct consequence of intemperance; deducting these, the admissions have been only about 12, and the deaths 1½ per 1,000, or about double what occurs from the same cause in Britain, and many even of these no doubt originated in drunkenness, though not so reported. This shows that the influence of a high temperature in increasing the prevalence or mortality of this class of diseases is by no means very great.

DROPSIES.

Under this head are comprised in the preceding Table—

	Admitted.	Died.	Proportion of Deaths to Admissions.
Subcutaneous Dropsy . . . . .	448	93	1 in $4\frac{2}{3}$
Abdominal Dropsy . . . . .	191	77	1 in $2\frac{1}{2}$
Water in the Chest . . . . .	20	10	1 in 2
Total . . . . .	659	180	1 in $3\frac{2}{3}$
Annual Ratio per 1,000 of Mean Strength . . . . .	7.8	2.1	..

The proportion of admissions and deaths by this class of diseases is very high compared with that which occurs among troops at home, being nearly as eight to one. This may, to a certain extent, be attributed to the greater prevalence of fever in this Command, as most of the cases of dropsy are stated to have occurred in men whose constitutions had been broken by repeated attacks of that disease.

The greater number of the deaths reported under this class in 1817 and 1818 occurred in Trinidad from a disease peculiar to that island, termed Trinidad cachexy, and which perhaps should here have been distinguished from the ordinary class of dropsies. Exclusive of these the deaths during the other 18 years have averaged about  $1\frac{1}{10}$  and the admissions  $5\frac{1}{10}$  per 1,000 annually.

The other classes of diseases offer little worthy of remark; the mortality is very low, and does not appear to require the same minute investigation as the preceding. Referring, therefore, to Abstract No. I. of Appendix for the particular diseases, we shall here merely contrast the ratio of admissions annually among 1,000 troops in this Command with what occurs among the same number in Great Britain.

	Admissions per 1,000 of the Force Annually.	
	In Windward and Leeward Command.	In Great Britain.
From Rheumatic Affections . . .	49	50
„ Venereal „ . . .	85	181
„ Abscesses and Ulcers . . .	204	133
„ Wounds and Injuries . . .	129	126
„ Diseases of the Eyes . . .	89	19
„ „ of the Skin . . .	6	29
Punished . . . . .	50	8

The most remarkable feature in this Table is the rarity of admissions under the head of venereal diseases in this Command, which, as will be seen by the general abstract, applies to syphilis and ulcers on the genitals of doubtful origin, as well as gonorrhœa, thus indicating a connexion between these three species of venereal affections; and it is particularly striking, that though ulcers on all the other parts of the body are nearly thrice as numerous as in Britain, those on the genitals are eight times less so. That the rarity of this class of diseases does not arise from the increased temperature merely is sufficiently evinced by the fact, that in the East Indies and Mauritius the ratio of venereal cases is greater even than at home. That it does not arise from any peculiarity in the constitution of the negro females, with whom the soldiers are generally in connexion, is also proved by the troops being so liable to it in the Mauritius, where the lower class of the female population are of this race; and it cannot be owing to any precautionary measures for preventing the propagation of the disease, because there are no police regulations on this subject in the Command. The same feature will hereafter be shown to exist throughout the whole of the West India settlements; and as those who know the habits of the soldier there would never think of referring this exemption to any superiority in moral conduct, it must be attributable, in a great measure, to the climate being unfavourable to the existence and propagation of that disease. The same peculiarity has been remarked in some of the old medical returns, nearly 50 years ago.

The proportion corporally punished in the Windward and Leeward Command has amounted, on the average of the last 20 years, to 50 per 1,000 annually. This is six times as high as in this kingdom; but the latter ratio has been taken on the average of the last seven years, during which corporal punishment has been very much restricted; while the former extends over 20 years, during the first part of which it was very common. The following Table will show that it has gradually decreased in that Command, till the ratio is now as low as in this kingdom:—

	1817	1818	1819	1820	1821	1822	1823	1824	1825	1826	1827	1828	1829	1830	1831	1832	1833	1834	1835	1836	Total.	Average.
Number corporally punished	692	647	344	204	230	251	255	350	167	120	102	154	121	173	131	111	69	75	89	42	4,327	216 $\frac{1}{2}$
Ratio per 1,000 of strength corporally punished	135	154	91	56	63	76	78	84	37	26	24	37	29	38	31	26	14	14	16	8		50

On referring to the general abstract there will be observed a remarkable prevalence of ulcers in this Command; not fewer than 161 per 1,000 of the strength are annually admitted on that account, and many are exceedingly difficult of cure, in some stations scarcely yielding to any treatment. It has been remarked by the most careful observers in the West Indies, that these local affections seem to depend on the same remote cause as fever, as persons suffering from them are seldom attacked by that disease.

Diseases of the eyes are a source of considerable inefficiency in this Command, being nearly five times as common as among troops at home; but this is the case in a greater or less degree in all warm climates. Diseases of the skin are exceedingly rare, being scarcely one-fifth part as common as in this country.

Having thus illustrated the diseases of the White Troops, we shall next proceed to a similar investigation of those of the Black Troops and Pioneers.

### BLACK TROOPS AND PIONEERS.

In this portion of our investigation we labour under the difficulty of possessing no information regarding the mortality to which this class of men are subject in their native country, which is the only correct standard whereby we can estimate with any degree of accuracy the influence of other climates on their constitutions. So far as statistical inquiries have extended, however, there is no country, either temperate or tropical, in which the mortality among the indigenous civil inhabitants between the ages of 20 and 40 seems materially to exceed 15 per 1,000 annually; and probably there is no country where troops composed of the indigenous inhabitants are subject to a higher rate. As an instance we may mention, that among the Malta Fencibles, composed of the natives of that island, the average mortality does not exceed 9 per 1,000 annually; and among the Cape Corps, composed of the aboriginal inhabitants of Southern Africa, it does not exceed 11 per 1,000: while among the Madras native troops it does not exceed 13, nor among those of Bengal is it more than 11 per 1,000 annually.

Now, were the climate of the West Indies as congenial to the health of the negro troops as that of their native country, it may be inferred that the mortality would not exceed that of the Indian army, which is composed of men about the same age, employed in the same description of military duty, and also in a tropical climate. In so far, then, as it exceeds that rate, it may fairly be attributed to the insalubrious influence of that climate on their constitutions.

It is by no means extraordinary that African troops should suffer as well as the whites from the climate of the West Indies, seeing that they are for the most part natives of the interior of Africa, of which the climate is probably very different; and it is well known that though the indigenous races of tropical as well as temperate climates are peculiarly fitted by nature for inhabiting and peopling the respective portions of the globe wherein they or their forefathers were born, the effects of a transition to any other is in general productive of a great increase in the scale of mortality.

This fact is well illustrated by the following Table of the admissions into hospital and deaths among this class of troops, serving in the West Indies during the last 20 years:—

Years.	Strength.	Admissions.	Deaths.	Ratio per 1,000 of Mean Strength.	
				Admitted.	Died.
1817	4,287	3,957	197	923	46
1818	3,389	2,903	126	857	37
1819	3,351	2,967	212	886	63
1820	2,858	2,191	109	767	38
1821	2,685	2,139	107	797	40
1822	2,533	2,220	108	877	43
1823	2,359	2,325	88	985	37
1824	2,195	1,883	64	858	29
1825	1,678	1,515	59	903	35
1826	1,523	1,444	65	948	43
1827	1,543	1,294	40	838	26
1828	1,510	969	54	642	36
1829	1,561	1,171	73	740	46
1830	1,520	1,039	60	684	40
1831	1,457	995	53	683	36
1832	1,379	1,122	50	806	36
1833	1,347	970	50	720	37
1834	1,310	872	43	666	33
1835	1,241	825	46	665	37
1836	1,188	756	41	635	35
Total	40,934	33,557	1,645	..	..
Average	2,047	1,678	82	820	40

Table III.  
Showing the admissions into Hospital and the Deaths among the Black Troops and Pioneers in the Windward and Leeward Command.

Thus, on the average of the last 20 years, 820 have been admitted into hospital, and 40 have died, out of every thousand annually; so that the rate of mortality is at least thrice as high among this description of troops as in the native army of the East Indies.

It may not, perhaps, be premature here to mention, that the same liability to a high ratio of mortality seems to affect negro troops in almost every quarter of the globe where they have been employed. In the Mauritius, they die at nearly the same rate as in the West Indies; in Ceylon, where a considerable number was employed in the Colonial Corps of that island, the mortality was so high that they nearly became extinct in the course of a few years, notwithstanding every care on the part of the military authorities to keep up their numbers; in Gibraltar, where the 4th West India Regiment was stationed for two or three years, 62 per 1,000 of the strength died annually; and even at Sierra Leone, on the sea-coast of their own continent, the mortality has averaged not less than 28 per 1,000 annually, being about double the ordinary ratio among other troops serving in their native country. This demonstrates beyond a doubt that the constitution of the negro can be but little fitted to adapt itself to foreign climates, when even the transition from the interior to the sea-coast of Western Africa has been attended with such prejudicial effects.

The returns of the mortality among the negro slave population throughout the West Indies, of which an Abstract will be found in the Appendix, No. III., sufficiently illustrate the unfavourable character of this climate to the constitution of the negro, the proportion deceasing there, exclusive of Jamaica, being 1 in 33 of the population annually; whereas in most other countries, of which we possess accurate statistical details, the mortality among the indigenous inhabitants is only from 1 in 45 to 1 in 50 annually; and this extra mortality among the negro population falls almost entirely upon the adults, negro children being in general remarkably exempt from disease. High as this ratio is among the slave population, however, we shall afterwards show it to be considerably less than among the troops, not in one, but in every colony throughout the Command; a sufficient proof that all the care and attention which can be bestowed on that race of men is quite unavailing to counteract the pernicious influence of a climate unsuited to their constitution.

Here, however, as with the white troops, it is pleasing to observe that there has been a considerable diminution in the mortality during the period included in this Report compared with the 14 previous years, when the strength and deaths were as follow:—

	1803	1804	1805	1806	1807	1808	1809	1810	1811	1812	1813	1814	1815	1816	Total.	Average.
Strength . . .	3,586	3,361	3,141	3,781	4,880	4,253	3,800	2,555	2,158	2,638	2,148	2,089	3,553	4,814	46,757	3,340
Deaths . . .	180	187	256	394	390	219	155	149	109	141	157	74	202	406	3,019	216
Ratio of Deaths per 1,000 of Strength . . .	50	56	81	101	80	51	41	58	51	54	73	35	57	84	. .	64

Thus the mortality among this class of troops on the average of these years was 64 per 1,000 annually, being one-half higher than during the last 20 years, so that to whatever cause it may be attributable, the mortality of the white and black troops within that period has diminished in the same ratio. The latter as well as the former were employed to a very considerable extent in Martinique, Guadeloupe, and the other settlements before referred to, and the strength and deaths there have consequently been excluded in this estimate.

In order to illustrate the influence of this climate on these troops, every disease by which either an admission into hospital or a death has been caused among them during the last 20 years has been specifically detailed in Abstract No. I. of Appendix; and of these the totals for the whole period have been arranged in classes as under, in order to exhibit the results in a more comprehensive form.

Table IV.  
Showing the principal Diseases  
among Black  
Troops and Pioneers  
in the Windward  
and Leeward Com-  
mand.

	Admissions.		Deaths.	
	Total among whole Force in 20 Years.	Annual Ratio per 1,000 of Mean Strength.	Total among whole Force in 20 Years.	Annual Ratio per 1,000 of Mean Strength.
By Fevers . . . . .	6,856	168	190	4.6
Eruptive Fevers . . . . .	373	9	102	2.5
Diseases of the Lungs . . . . .	4,048	99	676	16.5
" of the Liver . . . . .	301	7	37	.9
" of the Stomach & Bowels . . . . .	3,796	93	303	7.4
" of the Brain . . . . .	428	10	92	2.2
Dropsies . . . . .	215	5	87	2.1
Rheumatic Affections . . . . .	3,028	74	23	
Venereal . . . . .	705	17	2	
Abscesses and Ulcers . . . . .	7,480	182	30	
Wounds and Injuries . . . . .	3,274	80	35	
Punished . . . . .	1,573	38	1	
Diseases of the Eyes . . . . .	636	16	..	
" of the Skin . . . . .	277	7	8	
All other Diseases . . . . .	617	15	59	
Total . . . . .	33,557	820	1,645	40.

From this Table it appears that fevers, particularly those of the remittent and intermittent type, which prove the great source of inefficiency and mortality among the white troops, exert comparatively little influence upon the blacks. Eruptive fevers, especially small-pox, seem

very fatal to that race, as two have died out of every seven attacked. Fortunately that disease never prevailed generally throughout the Command, but its ravages were principally confined to Trinidad and St. Lucia, where it appeared in an epidemic form in 1819, both among the negro troops and population, and cut off upwards of ninety of the former; but it never prevailed to any extent in the other years, or at any of the other stations.

Diseases of the lungs, though not so common as among the whites, are productive of much more mortality, owing to the greater prevalence and more fatal character of inflammation of the lungs and consumption, by which nearly twice as many have died as among an equal number of white troops.

The fatal influence of this class of diseases among negro troops is not confined to this Command alone, but, as we shall afterwards show, it extends to every climate in which they have been employed; thus inducing the supposition that there must be in the constitution of the negro some peculiarity which predisposes him to affections of the lungs. Upwards of two-fifths of all the deaths among these troops have arisen from this class of diseases, and more have died annually by it alone in this Command than among the same number of troops in the United Kingdom by all diseases together—a sufficient evidence how unsuited the climate is to their constitutions.

Diseases of the liver affect this class of troops in but a very slight degree. Those of the stomach and bowels, too, though they occasion upwards of a sixth part of the whole deaths, are only about one-third as fatal as among the whites, and only about a fifth part as prevalent. Diseases of the brain would, at first sight, appear to be scarcely half as prevalent or as fatal among the black troops as the whites; but the difference arises entirely from the great proportion of admissions and deaths among the latter from *delirium tremens*, the direct consequence of intemperance; for apoplexy and palsy, the most important of this class of diseases, have been equally common among both. Each class of troops has suffered to nearly the same extent from dropsical affections.

The black troops have been still less affected by venereal diseases than the whites, the ratio treated being only half as high; but it is understood that most of them are married men. They seem also remarkably exempt from diseases of the eyes, and much more subject to rheumatic affections. The proportion corporally punished has been less than among the white troops, and the following statement will show how rapidly it has diminished of late years:—

	1817	1818	1819	1820	1821	1822	1823	1824	1825	1826	1827	1828	1829	1830	1831	1832	1833	1834	1835	1836	Total.	Average.
Number Corporally Punished.	310	203	132	76	99	116	96	117	60	50	34	33	25	45	57	51	23	28	11	7	1,573	79
Ratio per 1,000 of Strength Corporally Punished.	72	60	39	26	36	45	40	53	35	33	22	22	16	30	39	37	17	21	9	6		38

It is of course impossible, in the narrow limits to which these observations must be confined, to do more than thus direct attention generally to the most important of the diseases among this class of troops. The information in Abstract No. I. of Appendix will, however, afford those who may be inclined to enquire more minutely into the subject, the necessary materials for doing so; and we shall, therefore, proceed to investigate the relative salubrity of the different settlements comprised in this Command, by showing what proportion of the mortality referred to in the preceding pages occurred at each.

BRITISH GUIANA.

Lat. 6° 10' to 8° N. Long. 56° to 60° W.

BRITISH GUIANA comprehends the settlements on the Rivers Essequibo, Demerara, and Berbice, with their dependencies, extending about 200 miles from east to west along the shores of the South American Continent, and from 200 to 300 miles into the interior.

[British Guiana.

The soil of the whole of this coast is of a deep alluvial nature, and of comparatively recent formation, the immense quantities of deposit annually brought down by the numerous rivers intersecting that portion of the Continent having so rapidly gained upon the ocean that, in many parts, its waters have receded three or four miles within the last century.

Owing to this peculiarity in its formation, the country to the distance of many miles from the coast is a vast flat, with no other elevation than what may have been produced by an occasional sand-reef, and, except in the few spots where cultivation has extended, it is covered either with a dense forest of trees, or with rank grass of a gigantic height.

In most parts the land nearest the sea being somewhat higher than at a short distance inland, water readily accumulates during the rainy season, so as occasionally to inundate a large extent of country, and the forest being in many places too dense to admit of its evaporating, there is always in such situations an accumulation of what is termed Bush Water, containing great quantities of vegetable matter, and giving rise to noxious exhalations.

About 80 or 100 miles inland the country is described as being well diversified by hill and dale, with high and rocky land in the back ground. This portion of our territory, however, has been little occupied by European settlers. The plantations are principally scattered along the sea-coast, or on either side of the great rivers, where the recent alluvial deposits afford a rich soil for cultivation.

The climate throughout the whole of British Guiana is principally distinguished for its extreme moisture: as an instance, no less than 157 inches of rain fell in George Town, Demerara, in the year 1831, being nearly six times the quantity which falls annually in Great

Britain; and in 1830 it rained continuously throughout the whole year, except during September and October. In general, however, the tropical year may be divided into two wet and two dry seasons. The first wet season extends from December to January, and the second from May or June to August. During the latter period the land-winds principally prevail, and, blowing from the south and south-west over vast tracts of uncultivated and swampy grounds, are loaded with unwholesome vapours. In the dry season the sea-breeze generally sets in at 10, and continues till sunset.

The following Table exhibits the mean temperature of each month on an average of five years, for Demerara and Berbice respectively:—

	DEMERARA.			BERBICE.		
	Max.	Med.	Min.	Max.	Med.	Min.
January . . .	84½	80	75	82½	78½	75
February . . .	83	79	75	83	79½	76
March . . .	83½	79½	76	82½	78½	75½
April . . .	83½	80	76	84	79½	75½
May . . .	84½	80½	76	84	80	76½
June . . .	84½	81	76½	85½	80½	76
July . . .	85	80½	75	84½	80	76
August . . .	86	81½	76	85½	81	76½
September . . .	87	82	77	86½	81½	76½
October . . .	87	82	78	86	82	78
November . . .	85½	81	76½	85½	81	76½
December . . .	84	80	76	84½	79½	75½
Mean . . .	85	80½	76	84½	80	76

Having premised these general remarks on the climate of this coast, we shall now proceed to a more particular description of the localities where the troops are stationed. These, taken in succession from west to east, are,

First, Capoey Post, situated close to the sea-shore, about 20 miles from the north-west bank of the Essequibo, and consisting of a small square enclosure, protected by a trench and pallisades, with a barrack and hospital in the centre. Immediately in front of the post extends a swamp about 150 yards in breadth, never quite dry; and the ground around is altogether of so wet and marshy a character that the post is about to be removed to some less objectionable site. The force stationed there generally consists of from 40 to 50 men.

The next station is George Town, the capital of British Guiana, and head-quarters of the troops in this Command, built on the east bank of the Demerara River, near its embouchure. This town is intersected by numerous canals, dykes, and embankments, and during the rainy season is exceedingly wet and marshy. The surrounding country is very level. On the bank of the river most of it is under cultivation, but towards the interior it exhibits the same mixture of forest, savannahs, and marshes, which we have already stated to be the general characteristic of the whole of this coast.

The troops are principally quartered in three barracks, of which the Medical Reports supply the following particulars:—

Eve Leary Barracks are about a mile from the town, have been recently erected, and consist of two separate wooden buildings, of two stories, elevated on pillars to secure them from the damp, and surrounded by galleries and *jalousies*. There is a new hospital about a quarter of a mile from the barracks, and within 150 yards of the sea, consisting of two wings, connected by galleries, and also elevated on pillars.

York and Albany Barrack is an old colonial building, about a quarter of a mile north-east from the hospital, raised on pillars, and consisting of an upper and lower room, each having an open gallery to the north.

Kingston Barrack was formerly the general hospital of the station; it is about a mile to the south-west of Eve Leary Barracks, and consists of three stories, raised on brick pillars, and with a jalousied gallery round each.

All these buildings, particularly the last, are in low swampy situations, but the nature of the ground around the town seems not to admit of any better selection.

Between George Town and New Amsterdam, the next station of importance in the Command, there have, within the last few years, been established three small outposts along the coast, Fort d'Urban, Porter's Hope, and Mahaica. The first lies nine or ten miles to the east of George Town on the public road to Berbice, situated about 500 yards from the sea, and capable of accommodating one company. The second is six miles further in the same direction, and consists merely of a house three stories high, but well adapted for the troops, being open to the sea-breeze. The third is nine miles further, but of its local peculiarities we can furnish no details, except that it is built on a creek which forms the boundary between Demerara and Berbice. All these posts are esteemed more healthy than head-quarters, and are kept up for protecting the line of communication between these two colonies.

The Berbice district, constituting the Windward portion of British Guiana, is the most southerly of our possessions in the West Indies, and extends nearly 100 miles along the coast from the Albarri Creek to the Corantyne River. On all this tract the ground is so low that at high water it would be completely inundated, were it not protected by strong dams. Each estate is intersected by trenches or canals, for the purpose of irrigation; and wherever the country is not under cultivation it presents a succession of forests, savannahs, and marshes; the soil being, with the exception of occasional sand-ridges, entirely alluvial, and containing neither stones nor gravel to aid in the absorption of moisture, is, during a great part of the

year, little better than an accumulation of mud, which, when acted on by the sun, renders the air still more humid than in Demerara.

New Amsterdam, the capital of Berbice, lies about 57 miles to the eastward of George Town, at the entrance of the Berbice river, the left bank of which is thickly wooded, the right marshy, and covered with high rank grass and coarse shrubs. The garrison is quartered at Fort Canje, a small military post of a square form, bounded on one side by the Berbice river, on the other by a small stream called the Canje, and on the two remaining sides protected by trenches and wooden pallisades. This fort lies about a mile below New Amsterdam. The ground on which it is built is low and swampy, like every other spot in the vicinity.

There is a barrack, with an hospital and offices, within the fort, for the accommodation of the troops. The barrack is an oblong wooden building, consisting of a basement, used for stores, and two upper stories, each divided into four apartments for the soldiers, with some smaller rooms for the non-commissioned officers. The hospital is built also of wood, and consists of a basement and two stories, the former used for stores, the latter containing two wards for the patients. Both the barrack and hospital are surrounded by colonnades. The water for the troops is supplied from tanks in which the rain is collected.

Within the Berbice district there is another station for troops, called Fort Wellington, situated about 12 miles from New Amsterdam, and upwards of 60 from George Town, Demerara. The country around it is cultivated to the extent of about three miles, but all beyond is marsh and forest. The fort was erected in 1827, and consists of a small quadrangular building, defended by a stockade and ditch, within which are a barrack and hospital for the accommodation of one company. These are built on a ridge of sand, and have been generally esteemed healthy.

The mortality among the troops throughout all these stations in British Guiana during the last 20 years has been as follows :—

WHITE TROOPS.				BLACK TROOPS.		
Years.	Strength.	Deaths.	Ratio of Deaths per Thousand of Mean Strength.	Strength.	Deaths.	Ratio of Deaths per Thousand of Mean Strength.
1817	852	55	64	415	12	29
1818	737	20	27	122	2	16
1819	876	64	73	129	6	47
1820	569	91	160	110	2	18
1821	542	118	217	131	4	31
1822	611	47	77	184	11	60
1823	576	35	60	175	9	51
1824	732	86	117	168	5	27
1825	1,158	109	94	75	7	93
1826	1,162	110	95	74	5	68
1827	946	137	144	132	5	38
1828	912	122	134	170	10	59
1829	796	47	59	216	6	28
1830	1,073	88	82	208	13	63
1831	968	107	110	210	6	29
1832	914	31	34	190	8	42
1833	998	55	55	180	8	44
1834	1,228	65	53	189	5	26
1835	1,028	62	60	156	5	32
1836	1,011	36	35	146	5	34
Total ..	17,689	1,485	. .	3,300	134	. .
Average	884	74	84	165	6.7	40.6

Table V.  
Showing the annual ratio of Mortality of Troops in British Guiana.

Thus, taking the average of 20 years, the mortality at these stations has been 84 per thousand of the white, and nearly 41 per thousand of the black, troops annually, or about the same as throughout the whole Windward and Leeward Command. The diseases by which the mortality in each year has been occasioned are detailed in Abstract No. II. of Appendix, whereof the totals for the whole period have been arranged in classes as follow :—

	WHITE TROOPS.		BLACK TROOPS.	
	Total Deaths in Twenty Years.	Ratio of Deaths Annually per Thousand of Mean Strength.	Total Deaths in Twenty Years.	Ratio of Deaths Annually per Thousand of Mean Strength.
By Fevers . . . . .	1,047	59.2	28	8.5
Diseases of the Lungs . . . . .	112	6.4	59	17.9
"      "      Liver . . . . .	19	1.	1	.3
"      "      Stomach and Bowels. . . . .	157	8.9	19	5.8
"      "      Brain . . . . .	77	4.4	11	3.3
Dropsies . . . . .	22	1.2	8	2.4
All other Diseases . . . . .	51	2.9	8	2.4
Total . . . . .	1,485	84.0	134	40.6

Table VI.  
Showing the principal fatal Disease of the Troops in British Guiana.



Though the mortality at this station has not materially exceeded the usual rate throughout the Windward and Leeward Command, yet the deaths from fever have been considerably above the average. About a tenth part of these has been caused by intermittent fever, which, in almost every year, has been exceedingly prevalent in this colony, though comparatively rare in most of the other West India stations. But the great source of mortality has been remittent or yellow fever. In December 1819, and January and February 1820, it appeared in a very aggravated form among the 2d or Queen's, a corps which had previously suffered severely at Barbadoes, Grenada, and St. Vincent's, from fever and dysentery, and were supposed, in consequence of their debilitated constitutions, to have been peculiarly susceptible of this disease. It also proved very fatal to the same regiment in the first two months of 1821. There was then a healthy interval till May, when the fever again appeared among the 21st, which had just arrived from Barbadoes to relieve the Queen's: it continued to rage with great violence during July, August and September, in each of which months it cut off 5 per cent. of the corps, and did not entirely cease till November. So far as we can learn, there was at this time no peculiarity either of temperature, moisture, or other atmospherical phenomena, to account for its appearance or continuance. In February 1824 this disease broke out among the 27th Foot, just arrived from Gibraltar, but shortly after ceased till the middle of July, when it re-appeared and continued to rage with great violence till the middle of October, during which time it cut off about 10 per cent. of the corps. Eve Leary Barracks and Mahaica were the posts most affected, and on the troops being removed from them to other stations the disease disappeared. There being no atmospherical peculiarity at this period to which the disease could be attributed, the sudden transition of the corps from Gibraltar was blamed for it, without adverting to the fact that the 21st and Queen's had three years previously suffered much more, though several years resident in the Command. The autumnal months of 1825-26-27-28 were successively marked by the appearance of this fever. In the first two of these it cut off about 5, and in the last two about 10 per cent. of the force annually; but there was nothing different in the autumnal season of these years from those which had preceded them, when no sickness prevailed. From June 1830 to the end of 1831 Remittent Fever was again prevalent, though not so fatal as formerly, and was said to have arisen from the excessive quantity of rain which fell in those two years, without taking into account that a much greater mortality prevailed in former years when there was no such cause to blame for it. In the last of these years the sickness was principally confined to the line of coast from George Town to Porter's Hope, and at Mahaica, while to the eastward the troops were comparatively healthy.

We have been thus particular in tracing the progress of this disease on each of these occasions, because it is only by a careful comparison of the circumstances which mark its appearance and continuance at such periods that we can discover the fallacy or correctness of theories as to its origin.

Diseases of the bowels are here much less prevalent and less fatal than at most of the other stations, but the ratio of deaths by diseases of the brain is unusually high; more than one-half of them, however, have been from *delirium tremens*, the consequence of drunkenness, for which, unfortunately, this colony affords many facilities.

The diseases of the black troops offer no peculiarity worthy of notice, except the ratio of mortality by diseases of the lungs, which is nearly thrice as high as among the whites.

We have already stated that fevers have generally been most prevalent and fatal during the autumnal months: the following Table of the admissions and deaths among the troops in this colony during the last 19 years will more clearly establish the unhealthy character of that season:—

Table VII.  
Showing the influence of the seasons on Sickness and Mortality among Troops in British Guiana.

	Total Admissions.				Total Deaths.			
	By Acute Diseases.	By Chronic Diseases.	By Surgical Diseases.	Total by all Diseases.	By Acute Diseases.	By Chronic Diseases.	By Surgical Diseases.	Total by all Diseases.
In 19 Januarys .	2,143	177	579	2,899	80	15	2	97
19 Februarys .	2,267	183	486	2,936	71	13	2	86
19 Marches .	2,090	151	502	2,743	62	15	4	81
19 Aprils .	1,902	135	564	2,601	48	25	..	73
19 Mays .	1,981	137	640	2,758	44	14	1	59
19 Junes .	2,417	167	590	3,174	85	16	2	103
19 Julys .	3,636	132	480	4,248	167	13	..	180
19 Augusts .	4,148	128	444	4,720	158	18	1	177
19 Septembers	4,018	106	412	4,536	145	10	..	155
19 Octobers .	3,461	145	400	4,006	98	13	2	113
19 Novembers	2,828	121	438	3,387	51	22	3	76
19 Decembers	2,476	120	490	3,086	49	15	3	67
Total .	33,367	1,702	6,025	41,094	1,058	189	20	1,267

Prior to 1818 the admissions and deaths during each month were not enumerated in the returns, therefore this and the subsequent Tables of the influence of the seasons can only include 19 years at the utmost.

As the returns from Berbice have been kept distinct from those of British Guiana only during some of the years embraced in this Report, we cannot enter with the same precision into the details of that station. It will, however, be seen by reference to Abstract No. II. of Appendix, that from 1824 to 1836 inclusive, the mortality among the white troops at Berbice was 227 out of an aggregate strength of 2,992, being 76 per thousand, while throughout the

whole colony of British Guiana it averaged during the same years 86 per thousand of the strength annually. In like manner the mortality among the black troops at Berbice was 16 out of an aggregate strength of 600, being at the rate of 27 per thousand, while on the average of the same years it amounted throughout the whole colony to 43 per thousand annually. Thus, for both classes of troops, Berbice seems more healthy than Demerara, principally in consequence of fever being less prevalent and fatal there. The other diseases are much the same throughout both colonies: the period over which our observations have extended is, however, too short, and the numbers too few, to found any positive conclusions on that subject.

## TRINIDAD.

Lat. 9° 30' to 10° 51' N. Long. 60° 30' to 61° 20' W.

Trinidad.

This island lies adjacent to the South American continent, from which its nearest point is separated by a narrow strait of about 12 miles. It is upwards of 70 miles long by 50 broad, and in physical aspect presents a striking contrast to the low lands of Guiana, last described. On the northern extremity a bold range of mountains rises to the height of 3000 feet, broken into the most rugged and abrupt forms, and clothed to the summit with forest trees. Towards the south extends a chain of hills, of less elevation, and of a more pastoral character, while the centre of the island is occupied by a group of flat or round-topped hills, dividing it, as it were, into two extensive valleys, which are occasionally intersected by a succession of hill and dale. The whole island is well watered by numerous streams in every direction.

The greater part of the interior is uncultivated, the low grounds forming a succession of marshy plains, and the elevated spots being, for the most part, covered with dense vegetation of forest and underwood. Many parts are understood to be, as yet, unexplored, owing to their unhealthy character and the natural difficulties which the country presents to such an undertaking.

In an island so extensive, mountainous, and covered with forest, it may be supposed that the atmosphere is generally overloaded with moisture. It does not appear, however, that the quantity of rain which falls is so great as in Guiana, the average being about 65 inches annually, and this is said to be diminishing very materially with the progress of cultivation. The dry season commences in December and ends in May; during June and July showers are frequent, but in August, September, and October, the rain falls in torrents, often accompanied by violent storms. The weather generally moderates, and the rains become more slight towards the end of October, and there is seldom any fall after the beginning of December. In 1830 rain fell on 211 days.

The nights in this island are generally cool and pleasant, but the temperature during the day is much the same as at the other stations in the Command. The following Table shows the average range of the thermometer and fall of rain in each month throughout the year:—

	Temperature. Average of Five Years.			Fall of Rain.		
	Max.	Med.	Min.	In 1825.	In 1828.	In 1827.
January . . . .	85½	78½	71	wanting.	2.42	Monthly fall not specified.
February . . . .	86	79	71		.95	
March . . . . .	87	79	70		.45	
April . . . . .	88	80	71½		.25	
May . . . . .	87½	80	73	6.93	6.50	
June . . . . .	87	81	75	7.20	8.85	
July . . . . .	84	79	74½	8.37	7.86	
August . . . . .	84½	79½	74	7.95	4.70	
September . . . .	85	79½	73	7.82	6.60	
October . . . . .	84½	79	73	6.84	9.73	
November . . . .	84	78½	72½	3.85	4.20	
December . . . .	82	77	72½	5.89	5.40	
Mean . . . .	85½	79	72½	62.93	57.91	61.84

Port of Spain, the capital, lies on the west side of the island, partly encircled by a magnificent amphitheatre of hills. It is built on an excellent plan, which ensures free ventilation, and tends in a great measure to counteract the unhealthiness of its position in the vicinity of the great Eastern Marsh, and on an alluvial soil which, towards the sea, was very swampy, till recently improved by draining. There is only a small detachment of from 40 to 50 men in the capital; the rest of the troops, comprising the garrison, are at the following stations:—

St. James, which is generally occupied by the white troops, stands about two miles from Port of Spain, on a gently sloping plain. The soil is of a sandy nature, and readily absorbs moisture; but the site is considered unhealthy from being in the immediate vicinity of the Cocorite Swamp, and too near the thickly wooded hills, in the rear, to admit of free ventilation. It lies also exposed to sudden gusts of wind, which sweep through two deep ravines or gullies, loaded with moisture and the exhalations from a large tract of uncultivated ground in the rear.

The barrack consists of a large stone building for the men, having a basement and two stories, and another building of a similar description for the officers; the whole surrounded by an iron railing and brick wall, which enclose nearly five acres of ground. The hospital is a separate

building, consisting of a basement and upper story—the latter containing four wards. It is situated on dry and elevated ground, and, as well as the barrack, is supplied with water from a small rivulet which flows past the station.

Two miles from this post, at the foot of a hill, which intervenes between the Great Eastern Marsh and the capital, stands Orange Grove Barrack, in a low, confined situation, on a moist soil, and on the margin of a mountain-torrent, which is generally overflowed in wet weather, and stagnates in pools during the dry season. It was supposed that this barrack, by having the hill interposed between it and the Great Eastern Marsh, would be sheltered from its effects; but the locality proved so extremely unhealthy that it could not be tenanted by white troops, and is now occupied by about 100 men of the 2nd West India Regiment. About two miles from St. James's, in a different direction, there is another unhealthy post, called Cocorite, where from 12 to 15 men of these troops are generally stationed.

The head-quarters of the West India Regiment are about eight miles in the interior, at St. Joseph's, where they occupy barracks situated on a small eminence, having a rivulet winding round its base, and bounded in the rear by lofty mountains, covered with forest trees. Here the soil is dry and gravelly; there is no marshy ground in the vicinity, and the station is said, in general, to be healthy.

Formerly a considerable portion of the white troops were stationed in Fort George, a work on the summit of a hill 1100 feet high, about three miles to the west of Port of Spain, having the Cocorite Swamp at its base, and much exposed to bleak winds passing over the uncultivated ground, and deep ravines in its rear. This station has, however, long been abandoned in consequence of its extreme unhealthiness, and is now used only as a signal post.

Since 1832 a detachment has been sent to San Fernando, a village about 30 miles from head-quarters, but with which there is no communication except by water, owing to the uncleared state of the intervening country. The troops there are said to be very healthy, but we are unable to furnish any particulars regarding the barrack accommodation. The mortality among the troops throughout the island, during the last 20 years, has been as follows:—

Table VIII.  
Showing the annual  
ratio of Mortality of  
Troops in Trinidad.

WHITE TROOPS.				BLACK TROOPS.		
Years.	Strength.	Deaths.	Ratio of Deaths per Thousand of Mean Strength.	Strength.	Deaths.	Ratio of Deaths per Thousand of Mean Strength.
1817	553	142	257	782	33	45
1818	377	150	398	504	22	44
1819	290	85	152	603	74	123
1820	133	4	30	610	19	31
1821	256	6	23	462	23	50
1822	136	9	66	555	19	34
1823	132	8	60	521	22	42
1824	162	11	68	504	11	22
1825	184	20	108	356	10	28
1826	271	25	92	349	10	28
1827	478	38	79	327	6	18
1828	353	59	167	292	9	31
1829	380	8	21	437	18	41
1830	370	15	41	363	6	17
1831	355	22	62	327	13	40
1832	369	27	73	304	13	42
1833	381	19	49	269	9	34
1834	382	16	42	298	7	24
1835	338	21	62	282	4	14
1836	357	24	67	214	2	10
Total .	6,197	659	..	8,309	330	..
Average	310	33	106.3	415	16	39.7

Thus, during this period, the mortality has averaged about 106 per thousand of the white, and 40 per thousand of the black troops, annually. The high ratio of the former arises principally, however, from the deaths during the first three years, when the reports state there were a great number of debilitated and worn-out soldiers in the garrison; the subsequent mortality is under the general average of the whole Command, being only about 60 per thousand. The diseases by which the deaths in each year have been occasioned are detailed in Abstract No. IV. of Appendix, whereof the totals for the whole period have been arranged in classes as follow:—

Table IX.  
Showing the prin-  
cipal fatal Dis-  
eases of Troops in  
Trinidad.

	WHITE TROOPS.		BLACK TROOPS.	
	Total Deaths in Twenty Years.	Ratio of Deaths Annually per Thousand of Mean Strength.	Total Deaths in Twenty Years.	Ratio of Deaths Annually per Thousand of Mean Strength.
By Fevers . . . . .	392	61·6	27	3·2
Eruptive Fevers. . . . .	..	..	58	7
Diseases of the Lungs . . . . .	71	11·5	136	16·4
"    Liver . . . . .	7	1·1	7	·8
"    Stomach and Bowels . . . . .	111	17·9	46	5·5
"    Brain . . . . .	29	4·7	23	2·8
Dropsies . . . . .	48	7·7	9	1·1
All other Diseases . . . . .	11	1·8	24	2·9
Total . . . . .	659	106·3	330	39·7

On comparing these results with the average throughout the whole Windward and Leeward Command, it will be seen that the excess of mortality among the white troops in this island has principally been caused by fever and dropsies. Of the former there was a very severe epidemic in 1818, which cut off nearly a third part of the whole force. This disease had prevailed to a considerable extent in the island, from June to November of the previous year, but disappeared till the following July, when it broke out with great virulence among 23 men of the Royal Artillery, stationed in the capital, of whom 11 died. In the end of August it extended itself to the Royal York Rangers, stationed at Orange Grove, of whom 67 were attacked, and 17 died in the course of the following month ; during October 80 were attacked, and 39 died, but towards the end of that month the troops were removed to Fort George, after which very few were attacked, though many deaths took place among the convalescent during the remainder of that and commencement of the following year. Scarcely a soldier in the island escaped an attack of fever, and many had it twice.

When this epidemic first appeared, the weather was dry and sultry. In August the rain fell in torrents ; in October there were also some heavy showers, and the weather was broken and variable with a westerly wind. These atmospherical changes seem to have made no difference in the progress of the disease, but as the wind veered to the northward in November, it began to disappear.

In 1828 fever again broke out among four companies of the Royals, at St. James's, and the Artillery, at Orange Grove. It raged with great violence during the months of January, February, and March, which are generally esteemed healthy in this island ; it prevailed also in August, and in that year cut off, in all, about a seventh part of the force ; but it does not appear that there was any atmospherical peculiarity at either of these periods, to which it could readily be attributed.

These are the only instances in which epidemic fever prevailed to any great extent in this island during the last 20 years. With regard to the deaths by dropsy, it may be necessary to remark that these principally occurred during the years 1817 and 1818, among men whose constitutions had been broken by repeated attacks of the fever then prevalent ; and they seem to have resulted not from the ordinary class of dropsical affections, but from a disease of that nature peculiar to this island, termed "*Mal d'Estomac* or *Cachexia Trinidadæ*," but which has not prevailed among the troops there since that period.

The only remarkable feature in the diseases of the black troops was the appearance of small-pox in 1819, by which 58, or nearly a tenth part of that force in the island, were cut off. It first broke out among the inhabitants of Port of Spain, in the middle of February, and in the following month extended itself to the black troops. During the time it was raging, three detachments successively arrived from Barbadoes, of whom the greater part were immediately seized with it, though they bore marks of vaccination. In all, it appears that 156 were attacked, of whom 58 died, or rather more than a third part. The disease attained its height in June, and disappeared in September.

The healthy and unhealthy seasons appear by no means so distinctly marked here as in British Guiana. Taking the total admissions and deaths for 19 years, as was done in the details of that colony, we could discover no uniformity in the periods at which sickness and mortality have prevailed. As in several years, however, the admissions and deaths of a great part of the troops have been omitted, we conceive this portion of the returns too defective to allow any positive conclusions to be drawn ; and we have, therefore, deemed it unnecessary to submit the usual table illustrative of this subject.

TOBAGO.

Lat. 11° 16' N. Long. 60° 30' W.

This island lies close to Trinidad, from which its western extremity is distant only six miles. It is 32 miles in length, and 12 in breadth ; on the north extremely rugged and mountainous, and from the sea appears like a mass of dark abrupt precipices. Towards the south and west the ground descends into a succession of conical hills and ridges of no great elevation, which, as they approach the sea, terminate in broken plains and low lands. The eastern

Tobago.

district is also of a mountainous character. The soil in the valleys is generally a rich dark mould, and is well watered by numerous streams and rivulets. Cultivation being for the most part confined to a portion of the low lands near the sea on the south side of the island, the greater part of the interior is still in a state of nature, the high grounds covered with forests, the deep ravines choked up with vegetation, and the bottoms of the valleys, being very narrow and not possessing free drainage, generally of a wet marshy character.

The climate and seasons here are much the same as at Trinidad, only rather more humid ; but we possess no measurement of the quantity of rain which falls annually. In some of the low grounds excluded from the influence of the breeze, the heat is described as exceedingly oppressive, particularly at Scarborough, the capital, which lies at the foot of a hill on the south side of the island.

The troops, however, enjoy the advantage of a more moderate temperature, being quartered in Fort King George, on the summit of the hill above Scarborough, where the heat is modified by a constant breeze, and does not exceed the usual average in this Command, as may be seen from the following Table, showing the mean range of the thermometer there for the years 1823 and 1835 :—

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	General Mean.
Maximum . .	81½	81½	83½	82½	83	83	82½	84	83	83½	82½	81	82½
Medium . .	77½	78	79	79½	79	79½	80	81	80½	80½	80	77	79
Minimum . .	73	73½	74½	76	75½	75½	76	76	76½	76½	76	73	75

The barracks consist of four detached buildings of one story each ; one of these has generally been occupied by the Royal Artillery ; another by the black troops and military labourers ; and the others by two companies of an infantry regiment. The hospital is built at a short distance from the barracks on the declivity of the hill, and consists of two stories, the lower containing two, and the upper one ward for patients. Water is supplied by tanks and springs.

Notwithstanding the advantages of the elevated position of the barracks in securing a diminished temperature, the white troops stationed here have been, in general, very unhealthy, and at times subject to extraordinary visitations of mortality, as will be seen from the following Table :—

Table X.  
Showing the annual  
ratio of Mortality  
of Troops in To-  
bago.

Years.	WHITE TROOPS.			BLACK TROOPS.		
	Strength.	Deaths.	Ratio of Deaths per Thousand of Mean Strength.	Strength.	Deaths.	Ratio of Deaths per Thousand of Mean Strength.
1817	238	56	235	142	4	These numbers are too few to admit of any deductions being drawn from the ratio of mortality in each year.
1818	216	38	176	129	2	
1819	194	43	222	163	7	
1820	134	109	814	193	4	
1821	137	37	270	262	8	
1822	137	12	88	171	3	
1823	163	4	25	135	2	
1824	186	10	54	99	1	
1825	185	16	87	92	1	
1826	156	21	135	86	8	
1827	194	13	67	74	2	
1828	159	15	94	77	3	
1829	173	20	116	63	6	
1830	176	26	148	57	2	
1831	170	23	135	55	1	
1832	164	11	67	64	3	
1833	159	12	75	68	6	
1834	153	6	39	59	4	
1835	148	5	34	57	2	
1836	160	43	269	55	2	
Total .	3,402	520	. .	2,101	71	. .
Average	170	26	152·8	105	3·5	34·2

Thus, on the average of these 20 years, the mortality has amounted to about 153 per thousand of the white, and 34 per thousand of the black troops annually, the former being nearly double the rate which prevails throughout the whole Windward and Leeward Command ; and it will be observed, that 1820 was so unhealthy, that more than four-fifths of the white troops were cut off.

The diseases by which the mortality in each year has been occasioned are detailed in Abstract No. V. of Appendix, whereof the totals for the whole period have been arranged in classes as follow :—

	WHITE TROOPS.		BLACK TROOPS.	
	Total Deaths in Twenty Years.	Ratio of Deaths Annually per Thousand of Mean Strength.	Total Deaths in Twenty Years.	Ratio of Deaths Annually per Thousand of Mean Strength.
By Fevers . . . . .	354	104·1	18	8·6
Diseases of the Lungs . . . . .	37	11·	25	12·
,,    ,,   Liver . . . . .	7	2·	2	1·
,,    ,,   Stomach and Bowels . . . . .	82	24·	10	4·8
,,    ,,   Brain . . . . .	17	5·	4	2·
Dropsies . . . . .	12	3·5	9	4·3
All other Diseases . . . . .	11	3·2	3	1·5
Total . . . . .	520	152·8	71	34·2

Table XI.  
Showing the principal fatal Diseases of the Troops in Tobago.

This table shows that the great cause of mortality in this island is fever, which is sometimes of so virulent a type as to leave those attacked scarcely a prospect of recovery. More than thrice as large a proportion dies from diseases of this class as throughout the average of the other stations in the Command. The following particulars regarding the mortality in 1820 will show to what extent the ravages of this disease have occasionally prevailed among the white troops.

Several cases of fever, of a malignant type, occurred among the York Rangers employed in this island, during the year 1818, and part of 1819. On the 10th of April in the latter year, they were relieved by two companies of the 4th Regiment, who remained tolerably healthy till about the middle of February 1820, when an extremely fatal yellow fever broke out, and attacked all classes indiscriminately, as will be seen by the following return of the deaths from the 10th of April 1819, when the detachment landed in the island, till the 10th of September 1820, when it embarked for Barbadoes:—

	Strength.	Treated for Fever.	Died by Fever.	Recovered from Fever.	Escaped Fever entirely.
Commissioned Officers . . . . .	6	5	5	..	1
Non-Commissioned Officers and Privates . . . . .	123	116	84	32	7
Women . . . . .	11	11	8	3	..
Children . . . . .	6	6	3	3	..
Total . . . . .	146	138	100	38	8

This mortality occurred chiefly between the middle of February and the 8th of July. Of the 109 deaths which occurred in 1820, 107 were from fever alone.

An epidemic of a similar character, though not quite so fatal, occurred in 1801, when upwards of half the white troops in garrison were cut off; and when it proved so virulent, particularly among the white inhabitants of the town, that of 63 persons attacked, only two recovered.

This disease seems to have made its appearance, and raged with equal violence, at all seasons of the year. In 1818 it was particularly fatal in December, and continued so during January and February of the following year. In 1820 it began in February, and raged till July; then re-appeared in November, and continued till February 1821. In 1830 it broke out in July, and was most fatal in October. There seems thus to have been no uniformity in the periods at which sickness and mortality were most prevalent at this station. In this respect it much resembles Trinidad, and as the numbers of the garrison are but few, and the results at best would not be available for accurate conclusions, we deem it unnecessary to submit any detailed statement of the admissions and deaths in each month.

The salubrity of this island seems by no means improving; even during the last year upwards of a fourth of the whole force of white troops was cut off, principally by dysentery and diarrhoea—diseases which had never before occasioned so great a mortality there.

In order to show how very much the climate of this island appears, from some unknown cause, to have deteriorated of late years, we subjoin the following statement of the mortality among the white troops for the ten years antecedent to 1817:—

	1806	1807	1808	1809	1810	1811	1812	1813	1814	1815	1816	General Total.
Strength . . . . .	228	276	297	294	310	293	514	214	217	442	625	3,710
Died . . . . .	13	22	15	13	16	16	24	6	12	12	36	155
Ratio per Thousand of Strength died Annually . . . . .	57	80	50	44	52	55	47	28	55	27	59	50

Thus during these years, when the rest of the islands in this Command were more unhealthy than at present, the mortality in Tobago was only 50 per thousand, or about a third of what it has been since 1817; and this station then enjoyed such a character for

salubrity, that invalids were frequently sent to it from Trinidad for the recovery of their health.

Fatal as this island has proved of late years to the white troops, it does not appear to have affected the health of the blacks in any corresponding degree. Though the mortality by fevers and dropsies is about double the usual ratio, that is more than counterbalanced by the comparative rarity of fatal diseases of the lungs and bowels, and on the whole the deaths are considerably less than at most of the other stations.

## GRENADA.

Lat.  $11^{\circ} 58'$  to  $12^{\circ} 20'$  N. Long.  $61^{\circ} 20'$  to  $61^{\circ} 35'$  W.

Grenada.

THIS island is about 25 miles in length, and 12 in breadth, and lies about 60 miles north-west from Tobago. It is traversed throughout its whole length from north to south by an irregular range of mountains, rising to the height of more than 3000 feet, from which others of less elevation branch off in a lateral direction, forming a succession of rich extensive valleys, which, as they approach the sea, particularly on the south-east or windward side of the island, open into level alluvial plains. On this side there is also a considerable extent of low swampy ground, where, in the autumnal season, fevers of a very severe type are of frequent occurrence; but there are no troops quartered in that neighbourhood.

Though Grenada is mountainous, yet it is neither overgrown with dense vegetation, nor are its high lands of the same abrupt inaccessible nature as those of Tobago. The valleys are open, and most parts of the island admit of free cultivation; indeed so far back as 1776 two-thirds of it were under crop.

The soil consists principally of a rich black or reddish mould, which is well watered in every direction by numerous small streams from the mountains; and in the centre of the island are several hill-lakes of considerable magnitude.

The fall of rain is very considerable, amounting to about 65 inches annually; but we possess no measurement of the quantity in each month. Showers are frequent throughout the year; as the island, however, is well cleared, this supply of moisture readily evaporates without inducing any great humidity of atmosphere. The seasons are much the same as in Trinidad and Tobago. In the low grounds the heat is frequently very oppressive, but in the more elevated portions of the island the temperature is cool and pleasant; an elevation of a few hundred feet always reducing the thermometer several degrees, and procuring an elastic and bracing atmosphere.

The following Table exhibits the mean monthly range of temperature in the low grounds, on the average of five years:—

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	General Mean.
Maximum . .	85	85	86	$86\frac{1}{2}$	87	88	88	88	$88\frac{1}{2}$	88	87	86	87
Medium . . .	80	$79\frac{1}{2}$	80	81	$82\frac{1}{2}$	83	83	83	84	$83\frac{1}{2}$	83	81	82
Minimum . .	75	$74\frac{1}{2}$	$74\frac{1}{2}$	$76\frac{1}{2}$	78	78	79	79	$79\frac{1}{2}$	$79\frac{1}{2}$	79	76	77

St. George's, the capital, is situated on the leeward side of the island, at the foot of an amphitheatre of hills, encircling an extensive bay which faces the town. The barracks of the white troops are on Richmond Heights, at an elevation of 700 feet immediately above the town. They consist of two buildings of two stories each; one of them having an open gallery in front.

There is another barrack in Fort George, situated on a rocky promontory running into the sea, on the right side of the harbour, and close to the extremity of the town. It consists of a building of two stories; the lower divided into three apartments, in which the black troops are generally accommodated; the upper forming quarters for the staff-officers.

In the upper part of the fort, at an elevation of 120 feet above this barrack, stands another occupied by a small party of the artillery; and at the opposite extremity of the town, is a work now occupied by a few military labourers.

The hospital is situated on the edge of a precipice facing the sea, and consists of an insulated building of two stories; each containing one ward for the patients, with minor accommodations and having a verandah extending along the side.

The mortality among the troops in this island, during the last 20 years, has been as follows:—

Table XII.  
Showing the annual  
ratio of Mortality of  
Troops in Grenada.

Years.	WHITE TROOPS.			BLACK TROOPS.		
	Strength.	Deaths.	Ratio of Deaths per Thousand of Mean Strength.	Strength.	Deaths.	Ratio of Deaths per Thousand of Mean Strength.
1817	484	92	190	128	4	The numbers are too few to admit of any deductions being drawn from the ratio of mortality in each year.
1818	285	30	105	113	.	
1819	454	31	68	93	3	
1820	450	23	51	84	3	
1821	318	24	75	79	1	
1822	331	15	45	79	1	
1823	332	8	24	77	1	
1824	308	6	19	67	4	
1825	261	15	57	62	.	
1826	251	12	48	72	.	
1827	269	8	30	112	1	
1828	245	33	135	109	.	
1829	259	18	69	94	2	
1830	334	5	15	99	11	
1831	283	6	21	105	2	
1832	268	9	34	105	4	
1833	264	5	19	109	2	
1834	333	9	27	101	6	
1835	277	15	54	93	5	
1836	270	23	85	118	4	
Total	6,267	387	.	1,899	54	.
Average	313	19	61.8	95	3	28.4

Thus, during this period, the mortality has averaged about 62 per thousand of the white, and 28 per thousand of the black troops annually, so that to both the climate of this island is more favourable than the general average of the whole Command. The diseases by which the deaths in each year have been occasioned are detailed in Abstract No. VI. of Appendix, whereof the totals for the whole period have been arranged in classes as follow :—

	WHITE TROOPS.		BLACK TROOPS.	
	Total Deaths in Twenty Years.	Ratio of Deaths Annually per Thousand of Mean Strength.	Total Deaths in Twenty Years.	Ratio of Deaths Annually per Thousand of Mean Strength.
By Fevers . . . . .	165	26.3	9	4.8
Diseases of the Lungs . . . . .	41	6.6	18	9.5
„ „ Liver . . . . .	28	4.5	2	1.
„ „ Stomach and Bowels . . . . .	101	16.1	8	4.2
„ „ Brain . . . . .	29	4.6	8	4.2
Dropsies . . . . .	5	.8	4	2.1
All other Diseases . . . . .	18	2.9	5	2.6
Total . . . . .	387	61.8	54	28.4

Table XIII.  
Showing the prin-  
cipal fatal Diseases  
of Troops in Gre-  
nada.

Here it will be found that fevers and diseases of the lungs have been considerably under the usual ratio; but though in most of the years the proportion of deaths by fever has been comparatively low, this island has occasionally suffered very severely from its ravages. It appeared at Fort George in November 1816, and continued to rage with great violence till the end of the following February, during what was usually considered the healthy season. So virulent did it prove, that 10 per cent. of the white troops were cut off by it, and out of 11 officers of the York Rangers in that fort, 9 were attacked and 4 died, and even the colonial population suffered considerably. It is rather remarkable that the windward side of the island, where there is a great deal of low swampy ground, and which is generally the most unhealthy, was then almost exempt from fever. Diseases of the bowels also proved extremely fatal in 1817; but as they were principally confined to the soldiers of the 2nd Foot, who had been sent from Barbadoes in consequence of having suffered there to an unprecedented extent from dysentery, it is possible many of the deaths may not have been altogether attributable to the climate of Grenada.

In 1828 fever again cut off upwards of a tenth of the white troops of the garrison. It appeared about the middle of August, and continued to rage with great violence till the end of November; it was principally confined to the Royal Artillery quartered at Fort George. On their being moved to Richmond Hill it disappeared, but soon after broke out among a party of the 27th Foot stationed there, and continued, though with less violence, till the month of April.

From the history of this island, we learn that in 1794 yellow fever raged with dreadful violence. Every house was the abode of death; men long resident found no security; young and old, temperate and intemperate, were alike affected by it. Thus, though the extent



of cultivation, or other physical peculiarities of Grenada, may tend to render this disease of less frequent occurrence than in the colonies we have just described, there are periods in which these supposed sources of salubrity prove of no avail in procuring immunity from its ravages.

It is an extraordinary feature in the diseases of this island that those of the liver should prove such a source of mortality among the white troops; the deaths from that class being nearly thrice as high as at the other stations in the Command. We are unable to trace any cause to which this peculiarity can be attributed.

With regard to the black troops, the preceding table shows that, like the white, they have enjoyed a considerable exemption from diseases of the lungs. Those of the bowels are also under the average, and on the whole these troops seem more healthy than at any other station in the West Indies.

The influence of the seasons in producing sickness and mortality in this island is by no means very strikingly marked, either in the admissions or deaths, except in the month of September, as will be seen from the following Table :—

Table XIV.  
Showing the influence of the Seasons in producing Sickness and Mortality among Troops in Grenada.

	Total Admissions.				Total Deaths.			
	By Acute Diseases.	By Chronic Diseases.	By Surgical Diseases.	Total by all Diseases.	By Acute Diseases.	By Chronic Diseases.	By Surgical Diseases.	Total by all Diseases.
In 18 Januarys .	391	70	324	785	18	6	1	25
18 Februarys .	307	65	408	780	15	7	..	22
18 Marches .	377	76	320	773	11	10	1	22
18 Aprils .	430	52	337	819	10	3	1	14
18 Mays .	465	55	297	817	14	4	2	20
18 Junes .	444	62	283	789	16	6	1	23
18 Julys .	467	69	244	780	16	3	..	19
18 Augusts .	442	76	251	769	23	4	..	27
18 Septembers	531	97	252	880	41	8	3	52
18 Octobers .	399	64	255	718	28	7	2	37
18 Novembers	412	72	263	747	25	7	..	32
18 Decembers	390	75	264	729	16	3	1	20
Total .	5,055	833	3,498	9,386	233	68	12	313

Thus sickness has principally prevailed from April to September, and the greatest mortality from August to November; but unfortunately we have not the deaths in each month of 1817, when mortality prevailed at a different period, which would probably have tended to equalize the results.

## ST. VINCENT'S.

Lat. 13° 10' N. Long. 60° 37' W.

### St. Vincent's

THIS island is 18 miles long, and 11 broad, and lies about 70 miles to the north-east of Grenada. Its centre is occupied by a lofty range of mountains, which in some parts attain the height of 4000 feet, but rapidly decline towards the sea, leaving a considerable extent of low lands on either side, somewhat uneven in surface, but affording rich crops. The island is of volcanic origin; from one of its mountains (the Soufrière) there have been frequent eruptions—that of 1812 caused great devastation. At the base of this mountain is an extensive plain of nearly 6000 acres of most productive land; and to the north, in the Carib country, there is also a considerable extent of level and fertile ground.

The mountains are clothed from the base to the summit with immense forest trees; but the ground having everywhere the advantage of a gradual slope, and there being little jungle or brushwood, ventilation is not impeded. The valleys also are sufficiently wide and free from excessive vegetation to give a healthy character even to the uncultivated portion of the island, and there is little swampy ground, except in some spots near the sea, where the action of the waves has thrown up a barrier, which obstructs some of the small streams during heavy rains, and causes them for a time to overflow their banks.

In the valleys the soil chiefly consists of a rich black mould, or a mixture of clay and sand, in the high grounds it is of a light sandy character. The whole island is well watered by numerous rivulets; but only about one-third of its surface is under cultivation.

Owing to the height of the mountains, and their being shrouded in wood which attracts the clouds, the atmosphere of this island is generally humid, and rain is common during most of the year. In 1832, for instance, it fell on 298 days, and in 1822 on 261 days; the average quantity throughout the year is from 70 to 80 inches, and even considerably more on the high grounds. The dews are also very heavy. The temperature is about the average of what prevails at the other islands in the Command; but from July to October it is rather more variable.

The following Table, showing the mean monthly range of the thermometer on the average of five years, and fall of rain for two years, will serve to illustrate the nature of this climate :—

	Thermometer.			Fall of Rain.		Hygrometer.
	Maximum.	Medium.	Minimum.	1831.	1832.	For 1832.
				in. dec.	in. dec.	
January . . .	82½	79	74½	2·56	2·96	68·68
February . . .	82½	79	75½	1·17	3·96	67·14
March . . .	82	78½	75	2·97	1·42	67·99
April . . .	84	80	75½	1·16	3·39	67·93
May . . .	84	80	75½	8·58	4·53	69·30
June . . .	83	80	77	10·70	7·94	69·25
July . . .	83½	80	76½	10·52	9·70	70·25
August . . .	84	81	77½	11·18	8·56	69·66
September . . .	85	82	78½	9·35	13·38	69·69
October . . .	85½	82	79½	6·24	9·31	69·39
November . . .	85	81½	77½	13·19	8·62	69·41
December . . .	83½	80	76½	9·84	4·33	67·89
Mean . . .	83½	80	76½	87·46	78·10	68·86

Kingston, the capital, lies at the bottom of a bay near the south-west extremity of the island, and having an amphitheatre of wooded hills in its rear. The troops are principally quartered in Fort Charlotte, which is built on a very steep hill, about a mile and a half to the north-west of the town, 600 feet above the level of the sea, and having the advantage of a constant breeze and reduced temperature. The barracks are bomb-proof casemates within the fort; but, as these do not afford sufficient accommodation for the present force, eight temporary huts have been erected at Old Woman's Point, which forms the western headland of the bay, and is about 350 feet above the level of the sea. They are merely formed of wicker-work, plastered with clay, but have been found very healthy, free from damp, and much liked by the troops. Close to these stands the hospital, an insulated square building, consisting of a basement and upper story surrounded by a gallery; the former unoccupied, the latter divided into three wards. Good water is supplied from tanks.

A company has also of late years been stationed at George Town, in the Carib country, about 22 miles distant, where there is a good barrack in a healthy situation.

The mortality among the troops in this island during the last 20 years has been as follows:—

Years.	WHITE TROOPS.			BLACK TROOPS.		
	Strength.	Deaths.	Ratio of Deaths per Thousand of Mean Strength.	Strength.	Deaths.	Ratio of Deaths per Thousand of Mean Strength.
1817	519	77	148	296	7	The numbers are too few to admit of any deductions being drawn from the ratio of mortality in each year.
1818	311	30	96	122	1	
1819	394	13	33	98	7	
1820	366	13	36	67	2	
1821	310	17	55	47	1	
1822	286	18	63	43	2	
1823	339	24	71	35	2	
1824	439	29	66	39	3	
1825	429	33	77	36	1	
1826	401	22	55	35	1	
1827	309	28	91	27	3	
1828	318	14	44	22	3	
1829	279	10	36	21	1	
1830	278	7	25	20	..	
1831	292	8	27	18	1	
1832	318	16	50	26	..	
1833	351	8	23	28	2	
1834	537	10	19	30	2	
1835	535	14	26	33	..	
1836	421	17	40	32	..	
Total .	7,432	408	. . .	1,075	39	. . .
Average	372	20	54·9	54	2	36·2

Table XV.  
Showing the annual ratio of Mortality among Troops in St. Vincent's.

Thus, on the average of the whole period, the mortality has amounted to about 55 per thousand of the white, and 36 per thousand of the black troops annually, so that, with regard to both, the climate of this island may be considered as more favourable than most of the others in the Command. A considerable portion of the mortality among the whites in 1817, as we shall hereafter show, may possibly have been attributable to the climate of another island.

The diseases by which the mortality in each year has been occasioned will be found detailed in Abstract No. VII. of Appendix, whereof the totals for the whole period have been arranged in classes as follows:—

Table XVI.  
 Showing the prin-  
 cipal fatal Diseases  
 of Troops in St.  
 Vincent's.

	WHITE TROOPS.		BLACK TROOPS.	
	Total Deaths in 20 Years.	Ratio of Deaths annually per Thousand of Mean Strength.	Total Deaths in 20 Years.	Ratio of Deaths annually per Thousand of Mean Strength.
By Fevers . . . . .	83	11.2	1	.9
Eruptive Fevers . . . . .	2	.3	2	1.8
Diseases of the Lungs . . . . .	78	10.5	14	13.
"    Liver . . . . .	12	1.6	..	..
"    Stomach and Bowels . . . . .	180	24.2	12	11.2
"    Brain . . . . .	21	2.8	3	2.8
Dropsies . . . . .	12	1.6	3	2.8
All other Diseases . . . . .	20	2.7	4	3.7
Total . . . . .	408	54.9	39	86.2

The most remarkable feature in this table is the comparatively low rate of mortality by fevers among the white troops. It was only in 1824 and 1825 that the deaths from that cause amounted to the usual ratio of the Command, and then they occurred principally among the soldiers of the 27th Foot, recently arrived from Demerara, many of whom had there suffered severely from fever, by which they were so debilitated that they speedily sunk under its effects. Diseases of the stomach and bowels have been the principal source of mortality, 180 deaths out of 408 being of that class: but it is necessary to remark, that about one-half of these occurred in 1817 and 1818, in the right wing of the 2d Foot, which, having previously suffered to an alarming extent from dysentery at Barbadoes, was, in August 1817, removed to St. Vincent's, in the expectation of being benefited by a change of station. Many of the men on landing were taken into hospital in a hopeless state, and died shortly after their arrival: others had their constitutions so much impaired that they readily sunk under a fresh attack of the disease in the following year. Making allowance for this mortality, which cannot be altogether attributed to the climate of St. Vincent's, it is probable this class of diseases does not prove more fatal there than the average of the other stations in the Command. In estimating the general mortality of the white troops at 55 per thousand, we have on this account, probably rated it too high. Had the years 1817 and 1818 been excluded, the mortality would have amounted only to 45 per thousand. St. Vincent's is generally considered one of the healthiest of the West India Islands; a character which is fully confirmed by these results.

The black troops appear to have experienced the same marked exemption from fever, and liability to diseases of the bowels, as the whites; and here, as at all the other stations, diseases of the lungs have proved the principal source of mortality among the negro race.

The unhealthy months, so far as regards acute diseases, are May, June, July, and August, when dysentery generally prevails. The following Table shows the total admissions and deaths recorded in the Medical Returns in each month since 1817:—

Table XVII.  
 Showing the  
 influence of the  
 Seasons in pro-  
 ducing Sickness  
 and Mortality  
 among Troops in  
 St. Vincent's.

	Total Admissions.				Total Deaths.			
	By Acute Diseases.	By Chronic Diseases.	By Surgical Diseases.	Total by all Diseases.	By Acute Diseases.	By Chronic Diseases.	By Surgical Diseases.	Total by all Diseases.
In 19 Januarys .	415	138	266	819	13	19	..	32
19 Februarys .	498	117	278	893	16	6	2	24
19 Marches .	490	119	268	877	18	21	2	41
19 Aprils . .	458	151	299	908	16	15	..	31
19 Mays . .	570	151	299	1,020	18	9	2	29
19 Junes . .	586	159	282	1,027	24	13	1	38
19 Julys . .	552	131	288	971	22	7	..	29
19 Augusts .	477	93	237	807	25	6	2	33
19 Septembers	387	82	247	716	23	13	1	37
19 Octobers .	345	69	259	673	16	9	..	25
19 Novembers	296	94	271	661	14	7	2	23
19 Decembers	348	58	271	677	12	3	1	16
Total . .	5,422	1,362	3,265	10,049	217	128	18	358

Though sickness has prevailed most from April to August, the mortality has been too irregular to permit any decided deduction to be drawn, except that the three last months of the year, which in the adjacent islands of Grenada and Barbadoes generally prove the most fatal, here appear to have been quite the reverse.

#### BARBADOES.

Lat. 13° 5' N. Long. 59° 41' W.

#### *Barbadoes.*

THIS island lies about 60 miles to the east of St. Vincent's, and extends 22 miles in length, by 14 in breadth. When viewed from the sea it appears arid and rocky, exhibiting little of that exuberant vegetation which characterizes most of the other islands in this Command.

The north, south, and western districts consist principally of low land, rising by a succession of terraces towards the north-east and south-east, where there is a considerable extent of high ground, formed by a number of steep and conical hills, with deep intervening valleys; the greatest elevation in the island, however, does not exceed 1100 feet. Most of these hills are naked and barren, but others, particularly towards the interior, are richly clothed with verdure, and present a striking contrast to the flat uninteresting features of other parts of the island. The soil is in general very scanty in the upland districts. In the lowlands it is mostly calcareous, extremely light and absorbent, soon dry after the heaviest rains, and all under cultivation. There is only one marshy spot of any extent in the island; it lies about three miles to windward of the garrison, close to the sea, and is generally overflowed by the tide, but does not appear to exercise any prejudicial influence on the health of the troops.

The climate of Barbadoes is much the same as that of St. Vincent's, except that the quantity of rain is considerably less—the average amounts only to 58 inches annually. There is very little dew, and seldom any humidity of atmosphere. Owing to the flatness of the island, and it being open in almost every part to the sea-breeze, the heat is in general less felt, though the thermometer ranges fully as high as in any of the other islands, as will be seen from the following Table, taken on the average of five years:—

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Mean.
Maximum . .	83	84	85½	88	88	88	88	88½	88½	89	87½	86	87
Medium . .	78	78½	79½	82	82	82	82	82½	82½	83	81½	79½	81
Minimum . .	73½	73	74	75	76	76½	76	76	76½	75	75½	73½	75

The prevailing wind here is the trade from north-east to south-east. It generally begins after sunrise and continues till sunset, but is feeble during the night. In February, March, April, and May, when it is strong and regular, the climate is healthy and pleasant. June, July, and August are hot and disagreeable, but not generally unhealthy. About the middle of August the hurricane season commences; but, fortunately, these visitations are not of frequent occurrence. During September, October, and November the trade winds are weak and irregular, with heavy falls of rain and a general stillness in the atmosphere, which is most oppressive.

The troops are principally quartered in the district of St. Ann's, on an eminence overlooking Carlisle Bay and Bridge Town, the capital, where they are well exposed to the breeze, and enjoy a diminished temperature. The barracks consist of several large and substantial buildings of stone and brick, disposed in the form of a square, and having in the centre an open space for a parade-ground. These buildings, with the adjoining esplanade, extend over 30 acres. The hospital is constructed in a healthy situation, close to the beach, and about half a mile to windward of St. Ann's. It is of the same solid materials as the barracks, and consists of two stories, each containing a couple of wards. The upper story has a gallery to leeward with jalousied windows. The accommodation for the troops in this island is esteemed the best in the Command.

The mortality among the troops stationed here during the last 20 years has been as follows:—

Years.	WHITE TROOPS.			BLACK TROOPS.		
	Strength.	Deaths.	Ratio of Deaths per Thousand of mean Strength.	Strength.	Deaths.	Ratio of Deaths per Thousand of mean Strength.
1817	1,654	204	123	483	19	39
1818	1,528	117	77	457	9	20
1819	1,291	76	59	822	34	41
1820	894	91	102	849	45	53
1821	795	96	121	668	39	58
1822	718	42	58	686	41	46
1823	791	18	23	670	23	34
1824	1,192	58	49	593	16	27
1825	1,173	58	49	389	15	39
1826	1,236	54	44	361	20	55
1827	1,145	39	34	366	13	36
1828	1,196	43	37	355	14	39
1829	1,248	61	49	320	20	62
1830	1,337	65	49	296	16	54
1831	1,096	72	66	283	23	81
1832	1,176	110	94	246	21	85
1833	1,405	51	36	305	15	49
1834	1,343	34	25	275	9	33
1835	1,484	47	32	244	11	45
1836	1,234	65	53	253	8	32
Total	23,936	1,401	. . .	8,921	411	. . .
Average	1,197	70	58.5	446	21	46

Table XVIII.  
Showing the annual  
ratio of Mortality  
of Troops in Bar-  
badoes.

As this Table, however, only refers to those who died by diseases or under treatment, it does not include the mortality caused by the hurricane which took place on the night of the 10th of August 1831, and created great devastation throughout the colony. The total casualties by that event are reported to have been 1 officer, 1 serjeant-major, 1 serjeant, 1 drummer, 32 privates, killed; 2 officers, 49 non-commissioned officers and privates severely wounded; and 4 officers and nearly 200 non-commissioned officers and privates slightly wounded. Almost every building in the island was destroyed, and altogether no less than 2,500 persons are computed to have perished.

The diseases whereby the mortality in each year has been occasioned are detailed in Abstract No. VIII. of Appendix, whereof the totals for the whole period have been arranged in classes as follow :—

Table XIX.  
 Showing the principal fatal Diseases of Troops at Barbadoes.

	WHITE TROOPS.		BLACK TROOPS.	
	Total Deaths in Twenty Years.	Ratio of Deaths Annually per Thousand of Mean Strength.	Total Deaths in Twenty Years.	Ratio of Deaths Annually per Thousand of Mean Strength.
By Fevers . . . . .	282	11·8	34	3·8
Eruptive Fevers . . . . .	..	..	2	·2
Diseases of the Lungs . . . . .	379	15·8	167	18·7
"    Liver . . . . .	34	1·4	8	·9
"    Stomach and Bowels . . . . .	498	20·8	108	12·1
"    Brain . . . . .	80	3·3	17	1·9
Dropsies . . . . .	58	2·4	28	3·1
All other Diseases . . . . .	70	3·	47	5·3
Total . . . . .	1401	58·5	411	46·

From this it appears that the principal causes of mortality among the white troops have been diseases of the lungs and of the bowels. The deaths by the former are considerably above the average of what prevails throughout the whole Windward and Leeward Command; but it must be kept in view that, as Barbadoes is the station to which invalids are generally sent for the purpose of obtaining a passage to England, many of those labouring under consumption, contracted in the other islands, have died there, and, no doubt, increased the mortality by diseases of the lungs much beyond what could properly be attributed to the climate of that island. Diseases of the bowels constitute more than a third part of the whole deaths, and seem not to be diminishing of late years either in frequency or severity. They proved most fatal in 1817, when dysentery was extremely prevalent, particularly in the 2nd, or Queen's Regiment; so much so that about the middle of the year, nearly half of that corps were in hospital from it. Various means were adopted to protect them against the influence of this disease, but without effect. It was at length deemed expedient to change the quarters of the regiment, and in August the right wing was sent to St. Vincent's and the left to Grenada, but there was little abatement in its virulence at these stations; indeed, as will be seen by the abstracts of the mortality in the Appendix, this disease was very prevalent in that year throughout the West Indies.

The low ratio of mortality by fever is one of the most striking features in the diseases of the white troops at Barbadoes; it scarcely amounts to a third part of the general average throughout the Command, and since 1822 the deaths have not exceeded  $4\frac{1}{2}$  per 1000 of the strength annually, being less than in the Mediterranean. No such exemption, however, is manifest prior to that period, for in 1817 it cut off nearly 4 per cent. of the force; and in 1820 appeared in an epidemic form about the end of October, increased in severity during November and December, and terminated in the end of January. In 1821 it re-appeared almost exactly at the same period, attained its height in November, and ceased in the middle of January, though a few cases occasionally occurred till March. The disease in both these years was of the very worst type, and fatal to a large proportion of those attacked, though it did not spread very generally among the troops. It affected equally the temperate and intemperate, and among the officers was even more virulent in its character than among the privates. Of eight officers attacked in 1821 six died, and in the 4th Regiment, out of five, not one recovered.

On both these occasions the weather was more than usually cool and pleasant, and but little rain fell. No atmospherical changes seemed to produce the slightest influence on the disease.

The diseases of the black troops present nothing worthy of notice, except that those of the lungs and bowels are, as among the white troops, considerably above the usual average, so that the climate of this island seems to affect both in a similar way.

The influence of the seasons in producing sickness and mortality in this island may be estimated from the total admissions and deaths in each month of the last 19 years, stated in the following Table :—

	Total Admissions.				Total Deaths.			
	By Acute Diseases.	By Chronic Diseases.	By Surgical Diseases.	Total by all Diseases.	By Acute Diseases.	By Chronic Diseases.	By Surgical Diseases.	Total by all Diseases.
In 19 Januarys .	1,771	424	1,171	3,366	64	54	6	124
19 Februarys .	1,620	467	1,298	3,385	57	56	2	115
19 Marches .	1,578	548	1,284	3,410	47	62	7	116
19 Aprils .	1,996	591	1,308	3,895	40	48	3	91
19 Mays .	2,131	679	1,579	4,389	57	77	7	141
19 Junes .	2,146	639	1,417	4,202	51	85	3	139
19 Julys .	2,324	621	1,232	4,177	65	64	4	133
19 Augusts .	2,310	499	1,232	4,041	59	63	9	131
19 Septembers	1,991	517	1,091	3,599	65	62	5	132
19 Octobers .	1,862	549	1,081	3,492	82	72	6	160
19 Novembers	1,695	511	1,092	3,298	111	61	6	178
19 Decembers	1,574	516	1,037	3,127	75	48	6	129
Total .	22,998	6,561	14,822	44,381	773	752	64	1,589

Table XX.  
Showing the  
influence of the  
Seasons in pro-  
ducing Sickness  
and Mortality  
among Troops in  
Barbadoes.

Thus it appears that the greatest amount of sickness has been from May to September, but that the greatest mortality occurred in October and November, in which months the epidemic fever raged with great severity during 1820 and 1821. Exclusive of the mortality on these occasions, the deaths in all the months would be very nearly alike, except from February to April, a period which seems generally the most healthy in the West Indies.

### ST. LUCIA.

Lat. 13° 50' N., Long. 60° 58' W.

THIS island extends nearly 32 miles in length and 12 in breadth, and lies about 40 miles to the north of St. Vincent's. It comprises two districts, differing in physical aspect, but each in an eminent degree subject to the operation of those agencies which are supposed to exert a baneful influence on the health of Europeans in tropical climates. Basseterre, the lowest and best cultivated portion of the island, abounds in swamps and marshes. Capisterre, the more elevated part, consists of a succession of abrupt mountains of the most picturesque and fantastic shapes, covered to the summit with forest trees and dense underwood, and intersected by numerous ravines, which, being too narrow to admit of free ventilation, are at all times replete with moisture, and choked up with decayed vegetation in every stage of decomposition.

The climate is principally characterized by its extreme moisture and variableness. We possess no specific measurement of the quantity of rain which falls annually, but it is stated to be sometimes very great; indeed, during several months, but particularly in October and November, it is incessant, and showers are frequent for at least nine months in the year. The quantity which falls is, however, variable, and in some years even scanty. Cool dry weather generally sets in about Christmas, and continues for three or four months, at which time the climate is exceedingly pleasant. During the rest of the year the weather is sometimes dry and sultry, at others cold and damp, exhibiting a difference of from 10 to 12 degrees of temperature in the course of a few hours. This is a necessary consequence of the physical peculiarities of the island. The spire-like mountains, feathered to the top with tall forest trees, readily attract any moisture floating in the atmosphere, and are generally enveloped in clouds, which, on a change of temperature or wind, descend in torrents of rain. An accumulation of water thus takes place in the ravines and low grounds, and, being shaded from the action of the sun by the dense mass of vegetation, gives rise to thick mists and exhalations, thereby causing a feeling of damp and chilliness during the night, which forms too sudden a transition from the heat experienced during the day. We possess no record of the range of the thermometer, except for one year, but it is understood to be much the same as at Dominica.

Castries, the capital, lies at the extremity of a long and winding bay of the same name, in a low marshy situation, surrounded by an amphitheatre of hills which intercept every breeze. The fort, where the principal part of the troops are stationed, is built on the summit of a very steep hill, called Morne Fortuné, about a mile and a-half from Castries, and 850 feet above the level of the sea, having on each side a deep ravine, with a rivulet flowing through it, and numerous swamps to windward. The scenery around is mountainous and thickly wooded.

The barracks for the troops are situated within the fort, and consist of four buildings for the soldiers, and one recently erected for the accommodation of the officers. From their elevated situation they are much subject to high winds, which, sweeping over an extent of country replete with moisture, are supposed to add materially to the unhealthiness of this station. The hospital is at some distance below the barracks, on a ridge extending from the Morne to the sea, and consists of an insulated building of one story, containing four wards, with an open corridor round each side, the whole enclosed with an iron railing. There are also a few detached buildings about the fort, in which staff-officers are accommodated.

At the distance of a few miles from the harbour of St. Lucia lies Pigeon Island, about half

*St. Lucia.*

a mile in length and a quarter in breadth. It is of a conical shape, having on one side a steep cliff, and on the other a gradual slope to the shore, covered with trees and shrubs. On this slope is a small plateau, where a barrack and hospital have been erected. The barrack is an oblong building, of two apartments; the hospital an insulated house of one story, containing three wards for the patients. Both these buildings are surrounded by open corridors, and were esteemed more healthy than those occupied by the troops in St. Lucia till the events of the last year showed that they sometimes prove the reverse.

The mortality among the white and black troops stationed here during the last 20 years has been as follows:—

Table XXI.  
Showing the annual  
ratio of Mortality of  
Troops in St.  
Lucia.

Years.	WHITE TROOPS.			BLACK TROOPS.		
	Strength.	Deaths.	Ratio of Deaths per Thousand of Mean Strength.	Strength.	Deaths.	Ratio of Deaths per Thousand of Mean Strength.
1817	389	34	87	308	9	29
1818	214	44	206	589	25	42
1819	131	12	92	613	46	75
1820	123	10	81	548	21	38
1821	114	14	123	512	14	27
1822	104	41	394	426	10	23
1823	146	18	123	421	25	59
1824	240	55	229	388	16	41
1825	208	19	93	364	11	30
1826	255	19	75	281	14	50
1827	261	71	272	246	3	12
1828	283	17	60	236	10	42
1829	286	25	88	217	12	55
1830	240	34	142	270	13	48
1831	256	19	74	229	5	22
1832	373	21	56	219	12	55
1833	287	31	108	203	7	34
1834	344	25	73	197	6	30
1835	291	26	93	173	12	69
1836	284	56	197	166	11	66
Total	4814	591	. . .	6606	282	. . .
Average	241	30	122·8	330	14	42·7

Thus, on the average of these 20 years, the mortality has amounted to upwards of 122 per thousand of the white, and 42 per thousand of the black troops, annually. The diseases by which the mortality in each year was occasioned are detailed in Abstract No. IX. of Appendix, whereof the totals for the whole period have been arranged in classes as under:—

Table XXII.  
Showing the prin-  
cipal fatal Diseases  
of Troops in St.  
Lucia.

	WHITE TROOPS.		BLACK TROOPS.	
	Total Deaths in Twenty Years.	Ratio of Deaths Annually per Thousand of Mean Strength.	Total Deaths in Twenty Years.	Ratio of Deaths Annually per Thousand of Mean Strength.
By Fevers . . . . .	304	63·1	34	5·2
Eruptive Fevers . . . . .	60	12·5	36	5·4
Diseases of the Lungs . . . . .	5	1·	98	14·8
"    Liver . . . . .	189	39·3	6	·9
"    Stomach and Bowels . . . . .	21	4·3	47	7·1
"    Brain . . . . .	9	2·	16	2·4
Dropsies . . . . .	3	·6	17	2·6
All other Diseases . . . . .	3	·6	28	4·3
Total . . . . .	591	122·8	282	42·7

So far as regards the white troops, then, it appears that it is principally by fever and diseases of the stomach and bowels that the malignant character of this climate manifests itself, the proportion of deaths by each of these classes of diseases being at least double the average of the whole Windward and Leeward Command; and it will be seen by reference to the general Abstract before referred to, that though fevers have been by no means so great a source of mortality since 1830, yet diseases of the bowels have been on the increase; indeed, within the last two years, four-fifths of the deaths have been from that cause. It may be necessary to remark, however, that a great proportion of the deaths stated under that head during the last year occurred from dysentery among the troops at Pigeon Island, hitherto used as a convalescent post. So fatal did this disease then prove, that, though the mean strength of the detachment does not seem to have exceeded 55, there were 22 cut off by it, which, with three deaths from fever, makes the mortality amount to nearly half the detachment within the twelve months. Of all those stationed there, not one escaped sickness, and the few survivors

were so broken in constitution, that the medical authorities state there is little likelihood of their being able to serve again, unless by a removal to England. It was necessary to send reliefs several times from Morne Fortuné, and each detachment, though tolerably healthy on its arrival, was immediately affected with dysentery. It would thus appear that the operation of the cause to which this disease was attributable was confined principally to Pigeon Island, and did not extend even to stations in the immediate vicinity.

St. Lucia has always been noted for the extreme insalubrity of its climate to white troops, particularly as manifested in fevers and diseases of the bowels; for we find it stated by Sir Gilbert Blane,\* that out of a mean force of 1630, comprising the garrison in 1780-1, no less than 1639 were cut off, being more than the average strength in one year, the greater part of whom fell victims to these diseases. Though we have not had to record any such extraordinary instance of mortality during the period which has come under our investigation, still there seems very little amelioration in the climate during the last 20 years. Whatever the causes of disease may be, they continue in active operation.

On black troops the climate of this island seems to exert no marked influence, the degree of mortality by each class of diseases being much the same as at the other stations in the Command, except by eruptive fevers, which is unusually high, owing to small-pox having made its appearance in the island in February 1819, at a period when vaccine lymph could not be procured. A large proportion of the black troops were affected by the disease; 33 died within a few weeks, being about one in four of those attacked. These, with three deaths from measles in 1821, constitute the whole mortality under the head of eruptive fevers; and though we have been obliged, in order to follow out the same principles as with the other classes of diseases, to estimate what has been the average annual ratio, it is necessary to keep in view that they have not been of yearly occurrence, but took place merely on those two occasions.

To illustrate further the character of this climate, we submit the totals of the admissions and deaths in each month during the last 19 years in the following Table:—

	Total Admissions.				Total Deaths.			
	By Acute Diseases.	By Chronic Diseases.	By Surgical Diseases.	Total by all Diseases.	By Acute Diseases.	By Chronic Diseases.	By Surgical Diseases.	Total by all Diseases.
In 19 Januarys ..	623	257	322	1,202	45	29	1	75
19 Februarys ..	616	283	310	1,209	49	28	..	77
19 Marches ..	547	288	333	1,168	30	30	1	61
19 Aprils ....	702	213	330	1,245	45	19	2	66
19 Mays .....	797	230	375	1,402	60	26	5	91
19 Junes .....	819	210	266	1,295	42	23	1	66
19 Julys .....	830	275	277	1,382	33	29	..	62
19 Augusts ...	765	276	296	1,337	39	20	..	59
19 Septembers	717	260	282	1,259	26	28	1	55
19 Octobers ..	560	220	298	1,078	33	33	2	68
19 Novembers	644	260	281	1,185	29	26	1	56
19 Decembers.	635	253	286	1,174	48	35	1	84
Total ....	8,255	3,025	3,656	14,936	479	326	15	820

Table XXIII.  
Showing the influence of the Seasons in producing Sickness and Mortality among the Troops in St. Lucia.

Thus the greatest extent of sickness has been between April and September, but the principal mortality in December, January, and February, during which period, cool dry weather generally prevails. The months from August to November have been least fatal to the troops, though at several of the other stations they have exhibited quite the reverse character. It must be remarked, however, that here no season can properly be designated as healthy, for on a careful examination of the returns for the last 20 years, we cannot discover any month in which sickness and mortality has not at times prevailed, and to a very great extent.

## DOMINICA.

Lat. 15° 25' N., Long. 61° 15' W.

Dominica.

THIS island is about 29 miles in length and 16 in breadth, and lies nearly midway between the French settlements of Martinique and Guadeloupe. It is upwards of 100 miles to the north of St. Lucia, which it very much resembles in physical aspect, the interior being composed of a bold range of rugged mountains rising to the height of more than 5000 feet, and intersected by deep ravines which occasionally open out into narrow valleys; the whole clothed with a dense vegetation of forest-trees and shrubs, except in the few spots which have been brought under cultivation.

Dominica is apparently of volcanic origin; the soil in the interior is generally a light brown mould, but towards the sea-coast, and in the openings of the valleys, it is a deep black earth well adapted for cultivation. The island is watered throughout its whole extent by 30 rivers of considerable magnitude, and numerous rivulets. The combination of wood, water,

\* Medico-Chirurgical Transactions, Vol. III.



and mountain scenery which almost every part of it presents, however pleasing to the eye, seems to favour the development of diseases most inimical to the constitutions of Europeans.

The climate differs but little from that of St. Lucia, except that the rainy season is later in its commencement and termination. Showers, however, are frequent at all times ; indeed a day seldom passes without rain in some part of the island, and in September and October it often pours in torrents for several successive weeks. The quantity varies materially in different years, but unfortunately we have no exact measurement of it. Here, as at St. Lucia, the alternations of temperature are very considerable, the thermometer often varying several degrees in a few hours, but the mean does not exceed that of the other islands, and the minimum range is considerably below any of them, as will appear from the following Table, taken on the average of five years, from 1829 to 1834 :—

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	General Mean.
Maximum . .	83½	83	84	86	87	87½	87	88	87½	87	86	84	86
Medium . . .	76	75½	77½	79	80	81	81	81	81	80½	79½	77	79
Minimum . .	69½	70	72	72½	75	75½	75	74½	75	75	74	71	73

Roseau, the capital, is built on the south-west side of the island on a low point of land, which, by its projection into the sea, forms two small bays. The troops are principally quartered on the summit of a table-rock about 450 feet high, called Morne Bruce, overlooking the town, from which it is about a mile distant. This hill is almost surrounded by two deep and winding ravines, one of which forms the bed of a mountain torrent, the other contains many patches of moist and marshy ground.

The barracks at Morne Bruce consist of four detached buildings, each one story high, forming a square ; the hospital of two detached buildings, also of one story, and one of them having a gallery round it. These buildings are not enclosed, and therefore afford to the soldier much facility for indulging in intemperance.

A small detachment of black troops is generally stationed at Prince Rupert's Bay, a post on the sea-coast about 25 miles south of Roseau, where a most extensive line of works was constructed, which ultimately proved so very unhealthy that it became necessary to abandon them. The barracks have consequently been allowed to fall into decay, and the few black troops now kept there are accommodated in a wooden building of two apartments. This station affords one of many instances which might be adduced in the course of this report of the utter impossibility of securing the health of European troops against the insalubrity of certain localities. As these works were of great importance for the protection of the island, from their commanding an excellent harbour and landing-place, which would otherwise be open to an enemy, every attempt was made to render them habitable for white troops. The point of land on which they had been erected was composed of two hills called the Outer and Inner Cabrittes, the former 600, the latter 500 feet in height, connected by a valley, and the inner one joined to the mainland by an isthmus of swampy ground ; a chain of marshes also ran along the whole extent of the bay to windward, but as the troops were stationed in the valley, having the Inner Cabrittes interposed between them and the marshy ground, it was supposed their health would not be affected. It was soon found, however, that almost every one stationed there died : the summit of each hill was then selected with no better effect. Even when the experiment was tried of placing the troops on the furthest extremity of the Outer Cabrittes, and thus interposing two hills between them and the marshes, the station proved equally unhealthy, and at length the whole of the troops were withdrawn, and the works abandoned, after a very heavy expense had been incurred in their construction.

During some of the years over which this Report extends, there was a convalescent post for invalids at Scott's Head, a rocky promontory jutting into the sea, and which, being almost detached from the mainland, was expected to be in some measure exempt from the noxious agencies by which the health of the troops has been so much affected in this island, but it was found to be quite as inimical to their constitutions as the other stations, and was, in consequence, ultimately abandoned.

The mortality among the troops in this island during the last 20 years has been as follows :—

Table XXIV.  
Showing the annual  
ratio of Mortality of  
Troops in Dominica.

Years.	WHITE TROOPS.			BLACK TROOPS.		
	Strength.	Deaths.	Ratio of Deaths per Thousand of Mean Strength.	Strength.	Deaths.	Ratio of Deaths per Thousand of Mean Strength.
1817	288	161	559	337	25	74
1818	244	51	209	251	7	28
1819	240	16	67	223	10	45
1820	190	12	63	153	7	46
1821	197	78	396	123	4	33
1822	121	12	99	116	4	34
1823	145	11	76	117	1	9
1824	333	19	57	118	3	26
1825	326	36	110	112	6	54
1826	210	28	133	89	2	22
1827	191	13	68	81	2	25
1828	230	10	43	79	2	25
1829	227	22	97	77	4	52
1830	265	25	94	77	5	65
1831	234	16	68	85	5	59
1832	275	25	91	79	2	25
1833	235	31	132	76	1	13
1834	335	37	110	78	2	26
1835	220	31	141	90	3	33
1836	217	15	69	93	3	32
Total ..	4,723	649	..	2,454	98	..
Average	236	32	137.4	123	5	39.9

Thus, on the average of the last 20 years, the mortality has amounted to about 137 per thousand of the white troops, and 40 per thousand of the blacks, annually, the former being nearly double the average ratio of this Command. The diseases by which the deaths in each year have been occasioned are detailed in Abstract No. X. of Appendix, whereof the totals for the whole period have been arranged in classes as under :—

	WHITE TROOPS.		BLACK TROOPS.	
	Total Deaths in Twenty Years.	Ratio of Deaths Annually per Thousand of Mean Strength.	Total Deaths in Twenty Years.	Ratio of Deaths Annually per Thousand of Mean Strength.
By Fevers . . . . .	233	49.3	19	7.7
Eruptive Fevers . . . . .	..	..	1	.4
Diseases of the Lungs . . . . .	39	8.3	41	16.7
"  "  Liver . . . . .	8	1.7	4	1.6
"  "  Stomach and Bowels . . . . .	332	70.3	18	7.4
"  "  Brain . . . . .	25	5.3	1	.4
Dropsies . . . . .	3	.7	3	1.2
All other Diseases . . . . .	9	1.8	11	4.5
Total . . . . .	649	137.4	98	39.9

Table XXV.  
Showing the prin-  
cipal fatal Diseases  
of Troops in Do-  
minica.

The most remarkable feature in the mortality of the white troops is the proportion of deaths by diseases of the bowels, which is higher than by all the other diseases together, though there is no appreciable peculiarity either in the condition of these troops or the climate of the island, to which this can readily be attributed. It is not at occasional periods only that this class of diseases has manifested itself in so marked a degree, but in almost every year it has been the principal cause of mortality. The black troops seem not to have been affected by it to any corresponding extent.

The mortality by fever is also considerably above the average of the other colonies in this Command, principally owing to two very severe epidemics which occurred in 1817 and 1821. That of 1817 first appeared in June, and soon became extremely prevalent and fatal among both the troops and the inhabitants. Similar epidemics are said to have occurred in 1794, 1795, 1796, and 1805. During the epidemic of 1817 dysentery also prevailed. In that year 216 cases of fever were admitted into hospital, of whom 74 died, or one in three; of acute dysentery 160 cases, of whom 42 died, or one in four; and of chronic dysentery 179 cases, whereof 41 died, being nearly in the same proportion. The meteorological phenomena evinced nothing remarkable during that period to which the sufferings of the troops could in any respect be attributed.

In 1821 the fever appeared in September, and continued to rage with great violence during the two following months, in the course of which almost every white soldier on the island was attacked, and a third of the force perished. The weather at this period is described as hot and sultry, but there was no other peculiarity worthy of notice.

The diseases of the black troops present little subject for remark; they exhibit the same high mortality by diseases of the lungs which is so uniform a feature throughout all the stations in this Command; the other diseases are much about the general average.

The total admissions and deaths during the last 19 years, submitted in the following Table, will serve to illustrate the extremely unhealthy character of this climate at particular seasons.

Table XXVI.  
Showing the influence of the Seasons in producing Sickness and Mortality in Dominica.

	Total Admissions.				Total Deaths.			
	By Acute Diseases.	By Chronic Diseases.	By Surgical Diseases.	Total by all Diseases.	By Acute Diseases.	By Chronic Diseases.	By Surgical Diseases.	Total by all Diseases.
19 Januarys. .	351	90	203	644	20	18	..	38
19 Februarys. .	292	57	184	533	14	14	..	28
19 Marches. .	337	88	199	624	22	17	2	41
19 Aprils. .	412	91	179	682	24	7	3	34
19 Mays. .	329	63	214	606	14	6	2	22
19 Junes. .	501	84	224	809	18	10	1	29
19 Julys. .	694	77	155	926	28	11	..	39
19 Augusts. .	573	76	124	773	57	11	1	69
19 Septembers.	527	74	181	782	45	5	1	51
19 Octobers. .	494	83	156	733	63	12	..	75
19 Novembers.	462	87	167	716	74	15	2	91
19 Decembers.	328	97	173	598	27	18	..	45
Total. .	5,300	967	2,159	8,426	406	144	12	562

This shows very clearly that the most unhealthy months extend from June to November, the number of admissions and deaths being much higher at that period than during the other months of the year, and this has been the case not in a few instances only, but almost in every year over which these observations extend. It is probable that had we been able to separate the diseases of the black troops from those of the white, this feature would have been still more strongly marked.

#### ANTIGUA and MONTSERRAT.

Antigua, Lat. 17° 3' N., Long. 62° 7' W.

Montserrat, Lat. 16° 47' N., Long. 62° 13' W.

#### Antigua and Montserrat.

THE island of Antigua lies about 90 miles N.N.W. of Dominica, and is of an oval shape, 20 miles in length and 54 in circumference. It possesses little of that mountainous character which we have remarked in most of the islands previously described, the greatest elevation being 1210 feet, and on approaching it from the sea, instead of mountains covered with rich foliage and vegetation, nothing is visible but a barren rugged coast almost destitute of verdure. The high grounds are principally on the south and south-west side of the island, and consist of a succession of round-peaked hills partially covered with small trees and brushwood, and intersected by well-cultivated valleys. These hills sink rapidly towards the north-east, on which side a large portion of the island is low, and in many parts swampy.

The soil in the high lands is a reddish clay on a substratum of marl, that in the low lands a rich dark mould on a substratum of clay. The soil is extremely dry, as, with the exception of a few small rivulets among the hills, the island is destitute of running water.

The climate of Antigua is principally remarkable for a want of moisture; indeed, the average fall of rain is not above 45 inches annually; a very small quantity considering the rapid evaporation which takes place under a tropical sun. Even the dew is but scanty, and the island often suffers from severe droughts. The rainy season is very uncertain, but may be said to extend from June to the end of the year, though a considerable quantity falls also in the other months.

The deficiency of moisture under which this island labours, as compared with most of the others, has generally been attributed to the land being less elevated, and the absence of those dense woods which serve to attract the moisture; but it is probable a still better reason may be found in the fact that in many countries bordering on the tropics the supply of moisture is much more scanty than in the latitudes on either side of them.

Owing to the general dryness of the atmosphere, the alternations of temperature are but slight, the thermometer seldom ranging more than 4° in the twenty-four hours. The mean temperature is also rather under the average of the Windward and Leeward Command, as will appear from the following Table, exhibiting the mean monthly temperature on the average of four years (1829 to 1832), and the fall of rain also for four years, from 1823 to 1826:—

	Thermometer.			Fall of Rain.			
				1823	1824	1825	1826
	Max.	Med.	Min.	In. Dec.	In. Dec.	In. Dec.	In. Dec.
January . . . .	81½	78	74½	3·15	2·47	3·91	2·99
February . . . .	80½	77½	74½	·22	1·47	1·56	2·44
March . . . . .	79½	77	74½	2·33	·28	2·80	1·19
April . . . . .	79½	77	74½	4·21	1·31	2·85	1·26
May . . . . .	80	78	75½	3·47	2·08	4·81	5·11
June . . . . .	81½	79½	78	16·05	1·03	4·40	4·19
July . . . . .	81½	80	78½	4·46	2·99	6·35	1·8
August . . . . .	82	80½	79	3·08	4·34	4·43	1·69
September . . . .	82½	80½	79	4·06	5·94	3·16	5·07
October . . . . .	82½	80½	78½	3·36	3·31	5·95	2·36
November . . . .	81½	79½	78	9·88	2·35	8·10	4·5
December . . . .	80½	78½	76½	3·94	11·38	3·41	2·98
	81	79	77	58·21	38·95	51·73	35·58

The troops at Antigua are principally quartered on a range of heights about 400 feet above the level of the sea, commanding the entrance to English Harbour. On one of these, called the Ridge, stands a barrack for two companies; it is an oblong building, surrounded by a gallery and divided into several apartments. On Shirley Heights is another, at present unoccupied; and at Middle Ground, on the western side of the harbour, a third, consisting of a small building of one apartment. There is an hospital at Shirley Heights, with a basement and two upper stories, the latter containing two wards for the patients, and the usual store-rooms and offices. Between these heights and the sea are some small patches of moist or marshy ground, and on the west side there is also some of a similar nature.

The island of Montserrat, which forms a dependency of Antigua, and where a portion of the troops are generally stationed, lies about 22 miles south-west of it, and is about 12 miles long and 7 broad. It consists of a range of steep abrupt mountains, or rather, perhaps, of one lofty mountain 2500 feet high, of which the summit has been broken into a variety of precipices and deep chasms, but the base slopes off towards the sea by a succession of gentle ridges admitting of cultivation. With the exception of the town of Plymouth, which is unfavourably situated near the beach, having an amphitheatre of hills in its rear, intercepting the sea-breeze, the island enjoys a high character for salubrity.

The barrack for the troops is situated at the extremity of a ridge about 140 feet from the sea, flanked on each side by ravines, through which mountain-torrents flow in the rainy season. The building consists of an upper and lower story, the latter surrounded by a gallery; there are generally about 30 soldiers quartered in it. The hospital is a hired house, midway between the town and the barrack.

There has also of late been a detachment of from 20 to 30 men stationed at Barbuda, an island about 30 miles north of Antigua, but we possess no description of it, or of the accommodation for the troops there.

We have no means of separating the mortality among the troops at Montserrat or Barbuda from that which has taken place at Antigua, but throughout the whole of these stations it has been as follows :—

Years.	WHITE TROOPS.			BLACK TROOPS.		
	Strength.	Deaths.	Ratio of Deaths per Thou-and of Mean Strength.	Strength.	Deaths.	Ratio of Deaths per Thousand of Mean Strength.
1817	521	28	54	723	23	The numbers are too few to admit of any deductions being drawn from the ratio of mortality in each year.
1818	423	15	35	486	18	
1819	610	18	30	261	9	
1820	471	12	25	158	5	
1821	493	24	49	152	3	
1822	594	19	32	150	11	
1823	380	19	50	137	3	
1824	351	7	20	180	3	
1825	340	11	32	126	4	
1826	351	9	26	124	2	
1827	276	15	54	137	3	
1828	267	18	67	137	2	
1829	263	14	53	112	3	
1830	299	9	30	97	1	
1831	330	12	36	96	1	
1832	293	7	24	96	1	
1833	420	18	43	99	4	
1834	345	13	38	99	1	
1835	516	40	78	96	2	
1836	519	19	37	96	4	
Total .	8,062	327	. . .	3,562	103	. . .
Average	403	16	40·6	178	5	28·9

Table XXVII.  
Showing the annual ratio of Mortality among Troops in Antigua and Montserrat. \_

Thus on the average of the last 20 years, the mortality has amounted to about 40 per thousand of the white, and 29 per thousand of the black troops annually; the former being only half, and the latter two-thirds of the usual ratio throughout this Command.

The diseases whereby the deaths in each year have been occasioned are detailed in Abstract No. XI. of Appendix, whereof the totals for the whole period have been arranged in classes as follow :—

Table XXVIII.  
Showing the principal fatal Diseases of Troops at Antigua and Montserrat.

	WHITE TROOPS.		BLACK TROOPS.	
	Total Deaths in Twenty Years.	Ratio of Deaths Annually per Thousand of Mean Strength.	Total Deaths in Twenty Years.	Ratio of Deaths Annually per Thousand of Mean Strength.
By Fevers . . . . .	120	14·9	6	1·7
Eruptive Fevers . . . . .	..	..	1	·3
Diseases of the Lungs . . . . .	73	9·	60	16·8
"    Liver . . . . .	23	2·8	6	1·7
"    Stomach and Bowels . . . . .	74	9·2	13	3·6
"    Brain . . . . .	15	1·9	5	1·4
Dropsies . . . . .	11	1·4	3	·9
All other Diseases . . . . .	11	1·4	9	2·5
Total . . . . .	327	40·6	103	28·9

From this it will be seen that among both white and black troops the mortality by every class of diseases, except those of the liver, is considerably under the average of the other stations in this Command. In particular, there is a very marked exemption from fever, which has rarely shown itself to any great extent, or in a very aggravated form, during the period included in this Report. The year in which it caused the greatest mortality was 1835, when it cut off about 4 per cent. of the white troops. It broke out almost immediately after the hurricane in August of that year, and raged with great severity during the months of September, October, and November, affording rather a striking contradiction to the supposition that these phenomena tend to purify the atmosphere.

Though fever has been comparatively rare in Antigua during the last 20 years, it prevailed to a very great extent on former occasions. In 1816, for instance, a large proportion of the garrison was cut off, and so virulent did it prove, that many even of the negroes died from it. In any estimate of the relative salubrity of these colonies, therefore, we must be careful not to assume the comparative rarity of that disease in Antigua of late years, as any decided proof of the island being always secure from its ravages.

The mortality by diseases of the bowels among the white troops is less than half the general average in this Command, and it will be observed that the comparative exemption from that class of diseases, as well as fevers, extends also to the black troops, among whom the mortality from these causes is exceedingly low, while that by diseases of the lungs maintains its usually high average.

The following totals of the admissions and deaths in each month during the last 19 years, will serve to illustrate the relative salubrity of the seasons in this climate :—

Table XXIX.  
Showing the influence of the Seasons in producing Sickness and Mortality among Troops in Antigua and Montserrat.

	Total Admissions.				Total Deaths.			
	By Acute Diseases.	By Chronic Diseases.	By Surgical Diseases.	Total by all Diseases.	By Acute Diseases.	By Chronic Diseases.	By Surgical Diseases.	Total by all Diseases.
In 19 Januarys	579	123	307	1,009	43	12	1	56
19 Februarys	587	120	302	1,009	28	18	..	46
19 Marches .	529	131	265	925	22	14	..	36
19 Aprils . .	478	126	340	944	18	16	2	36
19 Mays . .	490	125	326	941	9	16	1	26
19 Junes . .	495	127	332	954	6	16	1	23
19 Julys . .	577	103	319	999	14	12	..	26
19 Augusts .	527	107	311	945	10	15	1	26
19 Septembers	554	117	287	958	15	14	1	30
19 Octobers .	605	89	291	995	28	11	1	40
19 Novembers	587	102	252	941	28	16	2	46
19 Decembers	473	103	269	845	27	8	..	35
Total . .	6,491	1,373	3,601	11,455	248	168	10	426

From this table it appears that sickness is about equally prevalent throughout the year, except in the month of December, and that the greatest mortality has occurred during October, November, January, and February, while the period from April to August has been uniformly healthy.

## ST. CHRISTOPHER'S or ST. KITTS, NEVIS, and TORTOLA.

St. Christopher's, Lat. 17° 18' N., Long. 62° 40' W.  
 Nevis . . . . . Lat. 17° 14' N., Long. 63° 3' W.  
 Tortola . . . . . Lat. 18° 20' N., Long. 64° 39' W.

THE island of St. Christopher's lies about 50 miles north-west of Antigua, and is of an irregular oblong form, measuring nearly 72 miles in circumference. A chain of barren rugged hills runs through the centre from north to south, in the midst of which stands Mount Misery, about 3711 feet high, and of volcanic origin. From the foot of these hills the ground slopes gradually to the sea, is all under cultivation, and exceedingly fertile. The soil in the low grounds is a dark grey loam, very light and porous, through which water percolates so quickly that it is quite dry within an hour after the heaviest rains. The island is not so well watered as most of the others we have described, there being only four streams in it of any magnitude.

The climate, like that of most mountainous regions within the tropics, is subject to great vicissitudes; the vapour drawn up during the day descending in the afternoon and evening, causes at these periods a considerable reduction of temperature, particularly from November to April. More rain falls than in the adjacent island of Antigua, especially during October, November, and December, but we possess no exact measurement of the quantity.

The following table shows the mean temperature of each month on the average of five years.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	General Mean.
Maximum . .	84	84	84	85	84½	85	86	86	88	87½	87	85	85½
Medium . . .	78½	79	79	80	80	82	82	82	84	83½	83	81	81
Minimum . .	75½	74½	74	74½	75½	77½	77	77	79	78½	78	76½	76½

The wind blows principally from the south-east or east during the summer and autumn, but from the north-east during winter and spring.

The principal barracks occupied by the troops in St. Kitt's are on Brimstone Hill, situated on the south-west side of the island, about 700 feet above the level of the sea. This hill is detached from all the others, and is precipitous on every side except where a narrow winding road forms an approach to it from the beach. It is almost entirely composed of limestone mixed with chalk. The barracks are built on several little platforms on the hill. Those on the summit consist of casemates within the citadel, which are generally occupied by the black labourers and the married soldiers with their families. The troops of the line occupy two large rooms on the windward side of the hill below the citadel, and the artillery a small barrack on the leeward side still lower down. The hospital is also situated on the hill, and consists of a stone building containing two wards with accommodation for 20 patients. The country on either side of Brimstone Hill is rich and productive, covered with crops of sugar-cane. There are no lakes, pools, or marshes, and the rain pours at once into the sea through deep ravines and clefts. A part of the troops are also quartered in the town of Basseterre, 10 miles from Brimstone Hill, where there is a small barrack, consisting of an insulated stone building of a basement and two stories, the former used for stores, the latter containing two rooms for the troops. The hospital contains accommodation for a very few patients, as the most serious cases are generally sent to Brimstone Hill.

Nevis, where a small detachment is quartered, lies at the southern extremity of St. Kitt's, from which it is separated by a strait two miles broad. It consists merely of a conical mountain, rising from the sea to the height of 2500 feet, and in circumference not exceeding eight leagues. The soil (except towards the top of the mountain, where it is stony,) consists for the most part of a strong tenacious marl, which does not readily absorb moisture. It is well watered, and in general fertile. The town of Nevis is situated on a sandy level, with low ground immediately behind it. The troops were at one time quartered in barracks within the town, but as the situation proved unhealthy, particularly during the autumnal months, a new barrack and hospital were erected for them at an elevation of 400 feet on the west side of the mountain. The barrack consists of three, and the hospital of two small apartments; they have generally been healthy, even at times when considerable sickness prevailed in the town.

Since 1831 a detachment of an officer and about 34 men have been stationed at Tortola, one of the Virgin Islands, about 160 miles N.N.W. from St. Kitt's. This island consists of a range of hills rising in some places to the height of 1600 feet, and encircling a spacious harbour or basin; they are for the most part barren, rocky, and precipitous, and there is but one valley of any extent throughout the island.

The town of Tortola is situated on the west side of the harbour at the foot of these hills, which rise so close behind it, that many of the houses are built within sea mark, and consequently suffer from damp. The barrack and hospital used by the troops are at the south-east extremity of the town, and as they lie open to the trade winds, which blow across the harbour, are not much incommoded by the heat. The bottom of the bay is alluvial, and rather swampy; this being, however, at the opposite end of the town, and to leeward of the barrack, occasions little inconvenience except during northerly winds. The barrack is of two stories, each containing two apartments; the hospital consists of a basement and upper story. Both buildings are supplied with good spring water.

Considerable sickness, particularly from fever, has been found to prevail among the troops

at Tortola, from which those at St. Kitt's have been in a great measure exempt. Unfortunately we possess no means of showing the mortality at each of these stations separately, but throughout the whole it has been as under :—

Table XXX.  
Showing the annual  
ratio of Mortality  
of Troops at St.  
Kitt's, Nevis, and  
Tortola.

Years.	WHITE TROOPS.			BLACK TROOPS.		
	Strength.	Deaths.	Ratio of Deaths per Thousand of Mean Strength.	Strength.	Deaths.	Ratio of Deaths per Thousand of Mean Strength.
1817	327	25	70	211	8	These numbers are too few to admit of any deductions being drawn from the ratio of mortality in each year.
1818	230	39	170	242	11	
1819	229	2	9	154	11	
1820	272	20	74	132	4	
1821	294	31	106	131	6	
1822	261	4	15	73	6	
1823	258	13	51	69	..	
1824	201	12	60	69	2	
1825	207	26	126	64	4	
1826	254	8	31	53	2	
1827	230	4	17	40	..	
1828	254	10	39	28	1	
1829	252	16	63	24	1	
1830	269	14	52	22	1	
1831	244	6	25	21	1	
1832	201	9	45	17	1	
1833	286	23	80	18	1	
1834	541	24	44	19	2	
1835	496	41	83	20	1	
1836	494	85	172	19	3	
Total .	5,800	412	..	1,426	66	..
Average	290	21	71·	72	3	46·3

Thus, on the average of these 20 years, the mortality has amounted to 71 per thousand of the white, and 46 per thousand of the black troops annually. The diseases by which the mortality in each year has been occasioned are detailed in Abstract No. XII. of Appendix, whereof the totals for the whole period have been arranged in classes as follow :—

Table XXXI.  
Showing the prin-  
cipal fatal Diseases  
of Troops at St.  
Kitt's, Nevis, and  
Tortola.

	WHITE TROOPS.		BLACK TROOPS.	
	Total Deaths in Twenty Years.	Ratio of Deaths Annually per Thousand of Mean Strength.	Total Deaths in Twenty Years.	Ratio of Deaths Annually per Thousand of Mean Strength.
By Fevers . . . . .	244	42·1	15	10·5
Diseases of the Lungs . . . . .	55	9·5	34	23·9
"    Liver . . . . .	13	2·2	1	·7
"    Stomach and Bowels . . . . .	60	10·3	9	6·3
"    Brain . . . . .	16	2·8	2	1·4
Dropsies . . . . .	5	·9	1	·7
All other Diseases . . . . .	19	3·2	4	2·8
Total . . . . .	412	71·	66	46·3

If our estimate of the climate of St. Kitt's was to be founded on this table, we should suppose fever to be a greater source of mortality than in the other islands; whereas, till last year, it was for a long period remarkably exempt from it. The greater proportion of the deaths by fever in 1820, 1821, and 1825, recorded in the Abstract from which this table is compiled, occurred among the detachment at Nevis, and even last year 14 of the deaths from that disease occurred at Tortola. On this occasion, however, it extended to St. Kitt's, and raged with great violence among the troops at Brimstone Hill and Basseterre, commencing at the latter station, from which it gradually extended itself throughout the whole island, and ultimately cut off nearly an eighth of the white troops stationed there. This remarkable visitation was preceded by no perceptible change in the atmosphere, nor was there any alteration in the locality or condition of the troops to which it could be attributed. Nevis, where the disease generally prevails, was in that year almost exempt from it.

All the other classes of diseases among the white troops are rather under the average of the Command, while, among the black troops, fevers and diseases of the lungs are considerably above it, but the number employed is too small to admit of specific deductions on this head.

Sickness and mortality appear generally to have been most prevalent at this station towards the latter end and commencement of the year; the returns of 1836, however, show the reverse, the sickly season having then extended from the beginning of May to October. It is thus difficult to lay down any general rule on the subject, except what may be derived from the

total admissions and deaths in each month during the last 19 years, as stated in the following Table :—

	Total Admissions.				Total Deaths.			
	By Acute Diseases.	By Chronic Diseases.	By Surgical Diseases.	Total by all Diseases.	By Acute Diseases.	By Chronic Diseases.	By Surgical Diseases.	Total by all Diseases.
In 19 Januarys .	455	113	293	861	35	14	3	52
19 Februarys .	321	180	258	709	11	10	1	22
19 Marches .	316	81	249	646	9	15	2	26
19 Aprils .	393	97	275	765	11	9	..	20
19 Mays .	454	100	314	868	16	13	1	30
19 Junes .	442	92	310	844	32	10	..	42
19 Julys .	443	92	271	796	21	9	..	30
19 Augusts .	462	76	271	809	20	7	1	28
19 Septembers	497	68	253	818	23	7	..	30
19 Octobers .	449	92	249	799	43	12	..	55
19 Novembers	484	90	235	809	50	5	1	56
19 Decembers	425	112	227	764	38	3	3	44
Total . .	5,131	1,143	3,205	9,479	309	309	12	435

Table XXXII.  
Showing the Influence of the Seasons in producing Sickness and Mortality among Troops in St. Kitt's, Nevis, and Tortola.

### GENERAL SUMMARY.

THAT portion of our investigation, which refers to the mortality and fatal diseases among the troops in this Command being now completed, we shall, before framing a summary of our conclusions, proceed to test the accuracy of the data on which they are founded, by ascertaining whether the aggregate strength and deaths in all the colonies comprised in the Command, correspond with what has been stated in the general tables at the commencement of this Report.

*General Summary.*

In Table I. the aggregate strength of white troops serving throughout the Command, was stated at . . . . . 86,661, the deaths at 6,803

In Table III. the aggregate strength of the black troops and pioneers serving there, was stated at . . . . . 40,934, the deaths at 1,645

Total . . . . . 127,595 8,448

In the preceding pages we stated the aggregate strength and deaths of black and white troops in each Colony, to have been as follows :—

	Aggregate Strength of Troops.	Total Deaths among Troops.
British Guiana . .	20,989	1,619
Trinidad . . . .	14,506	989
Tobago . . . . .	5,503	591
Grenada . . . . .	8,166	441
St. Vincent's . . .	8,507	447
Barbadoes . . . .	32,857	1,812
St. Lucia . . . . .	11,420	873
Dominica . . . . .	7,177	747
Antigua, &c. . . .	11,624	430
St. Kitt's, &c. . .	7,226	478
Total . . . . .	127,975	8,427
Total as above . .	127,595	8,448
Difference . . . .	380	21

So that over the whole period of 20 years, there is only a difference of 380 in the strength and 21 in the deaths, which is as near an approximation as could be expected in a force so much divided. This difference is by no means likely to affect the accuracy of the results, as it only averages 19 in the strength and about 1 in the deaths, annually.

The accuracy of the preceding deductions being determined, we proceed to submit the following abstract of them, exhibiting a comparative view of the mortality by the different classes of disease among the white and black troops in each of these colonies :—



Table XXXIII.  
Comparative view  
of the Mortality by  
the principal classes  
of Diseases among  
the White Troops in  
each of the Wind-  
ward and Leeward  
Colonies.

	Annual Ratio of Mortality per 1000 of White Troops serving at each of the following Colonies.										
	British Guiana.	Trinidad.	Tobago.	Grenada.	St. Vincent's.	Barbadoes.	St. Lucia.	Dominica.	Antigua, &c.	St. Kitt's, &c.	Average of whole Command.
By Fevers . . . . .	59.2	61.6	104.1	26.3	11.2	11.8	63.1	49.3	14.9	42.1	36.9
Eruptive Fevers . . .					3						
Diseases of Lungs . .	6.4	11.5	11.	6.6	10.5	15.8	12.5	8.3	9.	9.5	10.4
„ Liver . . . . .	1.	1.1	2.	4.5	1.6	1.4	1.	1.7	2.8	2.2	1.8
„ Stomach and Bowels . .	8.9	17.9	24.	16.1	24.2	20.8	39.3	70.3	9.2	10.3	20.7
„ Brain . . . . .	4.4	4.7	5.	4.6	2.8	3.3	4.3	5.3	1.9	2.8	3.7
Dropsies . . . . .	1.2	7.7	3.5	.8	1.6	2.4	2.	.7	1.4	.9	2.1
All other Diseases . .	2.9	1.8	3.2	2.9	2.7	3.	.6	1.8	1.4	3.2	2.9
Total . . . . .	84.	106.3	152.8	61.8	54.9	58.5	122.8	137.4	40.6	71.	78.5

This shows at a glance the diseases most inimical to the troops in each of these colonies, and it will be observed how marked a difference there is in the effect produced by their climates on the constitution. Tobago is most remarkable for fever; Dominica for diseases of the bowels and of the brain; Barbadoes for those of the lungs; Grenada for those of the liver; while Trinidad is most noted for its dropsies. Each seems in a greater or less degree subject to the operation of some agency highly prejudicial to European life. The fatal diseases of the black troops in these colonies observe a much greater degree of uniformity, as will appear from the following Table :—

Table XXXIV.  
Comparative View  
of the annual ratio  
of Mortality by the  
principal classes of  
Diseases among the  
Black Troops in  
each of these Colo-  
nies.

	Annual Ratio of Mortality per 1000 of Black Troops and Pioneers serving in each of the following Colonies.										
	British Guiana.	Trinidad.	Tobago.	Grenada.	St. Vincent's.	Barbadoes.	St. Lucia.	Dominica.	Antigua, &c.	St. Kitt's, &c.	Average of whole Command.
By Fevers . . . . .	8.5	3.2	8.6	4.8	.9	3.8	5.2	7.7	1.7	10.5	4.6
Eruptive Fevers . . .		7.			1.8	.2	5.4	.4	.3		2.5
Diseases of Lungs . .	17.9	16.4	12.	9.5	13.	18.7	14.8	16.7	16.8	23.9	16.5
„ Liver . . . . .	.3	.8	1.	1.		.9	.9	1.6	1.7	.7	.9
„ Stomach and Bowels . .	5.3	5.5	4.8	4.2	11.2	12.1	7.1	7.4	3.6	6.3	7.4
„ Brain . . . . .	3.3	2.8	2.	4.2	2.8	1.9	2.4	.4	1.4	1.4	2.2
Dropsies . . . . .	2.4	1.1	4.3	2.1	2.8	3.1	2.6	1.2	.9	.7	2.1
All other Diseases . .	2.4	2.9	1.5	2.6	3.7	5.3	4.3	4.5	2.5	2.8	3.8
Total . . . . .	40.6	39.7	34.2	28.4	36.2	46.	42.7	39.9	28.9	46.3	40.
Ratio of Mortality among the Male Slave Population of all ages in these Colonies, as stated in No. 3 of Appendix . .	34.	30.	47.	36.	34.	31.	35.	35.	30.	30.	30.

Thus the climate of each colony seems to affect the constitution of the black troops, too, in a different way; but, throughout the whole, diseases of the lungs and the bowels are generally the most fatal. It may be observed that the mortality in all the islands, except Antigua, Grenada, and Tobago, is higher among the troops than the male slave population; and that on the average, throughout the whole Command, the former is to the latter as 40 to 30. This is the more remarkable, as the mortality of the negro slave population is calculated upon male persons of all ages; including old men and infants, sickly and healthy: whereas that of the troops is calculated upon persons in the prime of life only, which certainly shows that they must be subject to some deteriorating influence from which the slave population are exempt; seeing that notwithstanding the alleged ill-treatment of the latter, a much smaller proportion is found to die than of the former, who have neither severe duty nor harsh treatment to undergo.

In order to show the variable character of the climate in regard to salubrity, the following Table has been compiled, exhibiting the relative healthiness of the white troops in each of these colonies for every year included in this Report :—

Table XXXV. •  
Comparative View  
of the ratio of Mor-  
tality among the  
White Troops in  
each of the Wind-  
ward and Leeward  
Colonies from 1817  
to 1836.

Years.	Out of every 1000 White Troops in the undermentioned Colonies, the following proportions have died in each year from 1817 to 1836 inclusive.										Average of whole Command.
	British Guiana.	Trinidad.	Tobago.	Grenada.	St. Vincent's.	Barbadoes.	St. Lucia.	Dominica.	Anigua, &c.	St. Kitt's, &c.	
1817	64	257	235	190	148	123	87.	559	54	70	162
1818	27	398	176	105	96	77	206	209	35	170	126
1819	73	152	222	68	33	59	92	67	30	9	83
1820	160	30	814	51	36	102	81	63	25	74	105
1821	217	23	270	75	55	121	123	396	49	106	109
1822	77	66	88	45	63	58	394	99	32	15	77
1823	60	60	25	24	71	23	123	76	50	51	49
1824	117	68	54	19	66	49	229	57	20	60	70
1825	94	108	87	57	77	49	93	110	32	126	76
1826	95	92	135	48	55	44	75	133	26	31	68
1827	144	79	67	30	91	34	272	68	54	17	85
1828	134	167	94	135	44	37	60	43	67	39	81
1829	59	21	116	69	36	49	88	97	53	63	58
1830	82	41	148	15	25	49	142	94	30	52	65
1831	110	62	135	21	27	66	74	68	36	25	69
1832	34	73	67	34	50	94	56	91	24	45	64
1833	55	49	75	19	23	36	108	132	43	80	50
1834	53	42	39	27	19	25	73	110	38	44	43
1835	60	62	34	54	26	32	93	141	78	83	57
1836	35	67	269	85	40	53	197	69	37	172	77
Average	84	106.3	152.8	61.8	54.9	58.5	122.8	137.4	40.6	71.	78.5

From this table it appears that in none of the years have the white troops in this Command ever been uniformly healthy in all the colonies. However low the mortality may have been in some, it has always to a certain extent been counterbalanced by the high ratio in others. This feature is, however, by no means so observable among the black troops, where the mortality is on the whole very uniform, though the numbers are too few to admit of a general table being framed to illustrate this fact on the same principle as the above; it may readily be observed, however, by referring to the details of each colony.

Having made these observations in regard to the extent of the sickness and mortality in this Command, we shall defer entering further on that subject till we have completed a similar course of investigation in regard to Jamaica, with which we shall now proceed.

## II. JAMAICA.

Lat. 17° 35' to 18° 30' N., Long. 76° to 78° 40' W.

II.  
*Jamaica Command.*  
 General Description.

THIS island lies about 900 miles to the west of the Windward and Leeward chain, and extends 170 miles in length from east to west, and about 50 in its broadest part from north to south. Throughout its whole length there runs a lofty range of mountains from 7000 to 8000 feet in height, forming a complete barrier between the north and south sides, except where intersected by two defiles, through which communications are established.

Each side of the island presents considerable diversity in physical aspect. On approaching the south, the immense mass of the Blue Mountains at once bursts on the view; their summits a succession of abrupt precipices, intersected by deep chasms and gullies; the lower range crowned with wood, less rugged in their outline, intersected by wider valleys, and ultimately terminating in a long plain, from 8 to 12 miles in breadth, which extends from their base to the ocean. On this level tract, or in its immediate vicinity, the principal towns and largest military stations are situated; the soil is of a rich brick-coloured mould, exceedingly fertile, and watered by numerous rivers, intersecting it in almost every direction.

On the north side there are few plains or level surface of any extent; the ground rises at once from the sea by a succession of gentle acclivities, separated by wide valleys; the hills are rounded on the top, and studded with thick groves of the pimento tree. These features gradually become bolder in their outline till they join the high range in the centre of the island, where they are covered with immense forests of cedar. The soil on this side is generally a chalky marl, producing a rich verdure, similar to that of an English lawn, and watered by an immense number of rivulets and cascades.

The interior of the island has quite a different appearance from either side, presenting all the varieties of feature peculiar to a highland district; in some parts rugged, difficult of access, and densely wooded; in others spreading out into a wide expanse of table land or elevated plain, from which rise a number of small hummocks, giving a slight undulation to the surface. The ground in such spots is generally clear and open, covered with rich grass, and of a pastoral character. These regions, in which cultivation has made but little progress, are principally used for the rearing of cattle.

Climate and Temperature.

As these portions of the island present varieties in physical aspect, so they exhibit a corresponding diversity in climate. On the plains or sea-coast of the south side, the thermometer at noon does not vary more than 8° or 9° throughout the year, its greatest height being about 92°, and lowest 83°. The mid-day heat on both sides of the island is greatly modified by the influence of the sea-breeze, which generally sets in from the eastward about 8 or 10 o'clock in the morning, increases in force till about 2, and declines with the sun, till, on the approach of evening, it is succeeded by the land wind from the mountains. When these winds become less regular, or altogether fail, as is sometimes the case before the rainy season, the atmosphere is exceedingly oppressive to the feelings, though the thermometer perhaps exhibits but little change in the temperature.

The quantity of rain which falls throughout the year is about 50 inches, and the seasons may be distinguished as follows. From the middle of December to the middle of April there is generally clear dry weather, except a few showers at Christmas. During the first three months of this period, north winds prevail, with considerable diminution of temperature, the thermometer sometimes sinking so low as 70° in the morning, but by mid-day it generally stands at from 83° to 85°; the sea-breezes at this time are weak and irregular. About the middle of April the sea-breeze fails altogether, the thermometer rises to about 86° at mid-day, and is seldom below 80° at night; the heat becomes oppressive, the atmosphere cloudy, and a few transient showers begin to usher in the spring rains, which continue with great violence during most part of May, and are generally preceded by heavy storms of thunder and lightning. The weather in June is generally hot and dry, the sky is seldom obscured by a cloud, the thermometer often rises to 92° at noon, the land wind fails, and the nights are consequently oppressive, but the sea-breeze is strong, and tends greatly to moderate the intensity of the heat. Very little change is perceptible throughout July or August, but in September there is the same close sultry weather as in April, which continues till the autumnal rains set in, about the middle of October. These are generally preceded by thunder and lightning, though not to so great an extent as in spring, and continue from four to six weeks, during which period the temperature undergoes a reduction of about three or four degrees by day, and six or seven by night.

From July to October are the hurricane months in this island, but fortunately these phenomena are of rare occurrence.

The seasons on the north side of the island are somewhat different, the rains being generally a month later in their commencement, and much longer in their duration than on the south side; a greater quantity also falls, and the showers are more equally distributed throughout the year. Owing to the vicinity of the mountains, and there being little extent of level ground, the atmosphere is cooler in winter, and more liable to sudden alternations of temperature.

The high lands in the interior of the island possess a very different climate from that of either side, their great elevation producing a corresponding diminution of temperature, which would

be still more perceptible, were it not that the sea-breeze, which modifies the heat of mid-day in the low country, does not extend to the mountains, and is even but partially felt at the distance of a few miles from the coast. It is consequently in the morning and evening that the diminution of temperature is most felt in the high grounds; at which periods it sometimes exceeds 25°. The following Table of the temperature at Maroon Town, the highest station occupied by our troops, contrasted with that of Kingston, will best serve to illustrate this fact:—

	Temperature at Kingston, on an average of five years, from 1823 to 1828.			Temperature at Maroon Town, for 1831.		
	Maximum.	Medium.	Minimum.	Maximum.	Medium.	Minimum.
January . .	83	78	73	78	70	60
February . .	82½	78½	74	81	76	65
March . .	82½	78½	74	79	72	66
April . .	84	79½	75	82	76	70
May . .	84½	80½	76½	80	76	70
June . .	85½	82	79	82	74	69
July . .	88	84	80	82	74	70
August . .	87	83	80	80	76	72
September . .	86	82	79	81	79	74
October . .	85½	82	78	84	74	70
November . .	84½	80	76	80	75	69
December . .	84	79	74½	79	75	69
Mean . .	85	80½	76½	80½	74½	68½

In this island almost any variety of climate may be procured. At a residence 4200 feet above the level of the sea, the range of the thermometer is from 55° to 65°; in the winter it falls even as low as 44°. There the vegetation of the tropics disappears, and is supplanted by that of temperate regions. Showers are common in the interior almost throughout the whole year, but they do not fall with the same violence as in the plains, and the quantity of rain appears to be less. The air is exceedingly humid, subject to dense fogs, and those rapid alternations of temperature peculiar to all mountain regions.

While the pestilence of yellow fever rages in the low grounds, and along the coast of this island, cutting off its thousands annually, these elevated regions enjoy a complete immunity from its effects; for that bane of European life has never been known, in any climate, to extend beyond the height of 2500 feet. The inhabitants are said to enjoy a degree of longevity rarely attained in other countries, and to exhibit that ruddy glow of health which marks the countenance in northern climes, and forms a striking contrast to the pallid, sickly residents of the less elevated districts.

This will suffice for a general description of the island. We shall afterwards notice more particularly the locality of each military station, when we come to investigate the extent of mortality among its garrison; meantime we shall proceed to furnish some details in regard to the force employed throughout the island.

With the exception of a small detachment of one of the West India regiments, the force in this island, has, during the last 18 years, consisted entirely of white troops, and has varied from two to three thousand men, according to circumstances. Of these about three companies are artillery; the others, the service companies of regiments of the line. To each of the regiments is attached, for fatigue duties, a number of black pioneers, of whom we shall hereafter be able to furnish a few particulars; the following details, therefore, refer to the white troops only.

A short description of each barrack and hospital in the Command, supplied from the documents of the Medical Department, will be found in a subsequent portion of this Report, where we have detailed the local peculiarities of each station occupied by our troops. It is therefore only necessary here to remark, that, during the period over which our observations extend, these buildings have been kept up entirely by the local legislature, and are not under the direction of the Ordnance Department—an arrangement frequently deprecated in the Medical Reports, as leaving this important requisite to the health and comfort of the soldier entirely at the discretion of men over whom the military authorities have no control, nor any means of enforcing improvements which they may deem essential for his better accommodation.

Till within the last three years, when the troops in this island were placed on the same footing as in the Windward and Leeward Command, the rations were provided at the expense of the colonial government, and were as follows:—to each soldier, for one week, 4lbs. of fresh beef, 1lb. of salt beef, 1½lbs. of salt pork, 7lbs. of flour (equivalent to 8½lbs of bread), and 7 gills of rum, for which he was liable to a stoppage of 3½d. per day. The meals are regulated in much the same way as in the Windward and Leeward Command.

Except during periods of sickness, when the duty of a large proportion of the troops falls on the remainder, the usual details do not seem by any means severe. The stations on the south side of the island being very much concentrated, it is seldom that any long marches, or duties of a harassing nature, have to be performed, unless in the event of insurrection among the negroes, which has occurred but once during the period now under observation. Fatigue duties are principally confined to clearing the ground in the neighbourhood of the barracks, and even that is generally performed by the black pioneers. The ordinary routine of parades and drills is so conducted as to avoid all unnecessary exposure

Troops employed.

Barrack and Hospital Accommodation.

Rations and Diet.

Duty and Employment.

or fatigue ; so that there seems no deteriorating influence attributable to the nature of the soldier's duties in this climate, except what may result from mounting sentry during the heat of the day, which is unavoidable, from the small number of black troops being insufficient for that purpose.

With these preliminary observations, we shall now exhibit, in the following Table, the effect of the climate of this island on the health of the white troops stationed there during the last 20 years.

Table XXXVI.  
Showing the Admissions into Hospital, and Deaths among the White Troops in Jamaica.

Years.	Strength.	Admissions.	Deaths.	Ratio of Admissions per 1000 of mean Strength.	Ratio of Deaths per 1000 of mean Strength.
1817	3,285	6,552	288	1,994	88
1818	2,353	4,403	209	1,871	89
1819	2,531	5,279	743	2,085	294
1820	1,895	3,686	290	1,944	153
1821	2,606	4,508	303	1,729	116
1822	2,541	4,691	434	1,846	171
1823	2,278	3,963	148	1,739	65
1824	2,670	5,069	224	1,898	84
1825	2,512	6,088	772	2,423	307
1826	2,039	3,269	163	1,603	80
1827	2,795	6,372	626	2,250	224
1828	2,536	4,103	189	1,618	74
1829	2,709	3,923	140	1,448	62
1830	2,842	4,712	275	1,657	97
1831	2,232	3,691	298	1,653	133
1832	2,046	3,584	227	1,751	111
1833	2,815	5,186	244	1,842	86
1834	3,016	5,593	283	1,854	93
1835	2,881	4,638	215	1,610	75
1836	2,985	4,145	183	1,389	61
Total .	51,567	93,455	6,254	. .	. .
Average	2,578	4,672	313	1,812	121.3

From this table it appears that the proportion of admissions into hospital in the course of the year is rather less than in the Windward and Leeward Command, being 1812 per thousand of the strength annually ; that is, every soldier has an attack of some disease or other, twice in the course of thirteen months.

Though the extent of sickness is less than in the Windward and Leeward Command, the mortality is much greater. The preceding table shows it to be 121 per thousand of the strength annually, but this includes only those who died in regimental and detachment hospitals. The whole deaths among the troops in the Command, as appears from the War Office Returns, by which the issue of pay is regulated, have been as follows :—

	1817	1818	1819	1820	1821	1822	1823	1824	1825	1826	1827
Deaths per War Office Returns . . . . .	324	225	790	295	311	445	174	231	802	165	640
Deaths per Medical Returns . . . . .	288	209	743	290	303	434	148	224	772	163	626
Omitted in Medical Returns . . . . .	36	16	47	5	8	11	26	27	30	2	14
	1828	1829	1830	1831	1832	1833	1834	1835	1836	Total.	
Deaths per War Office Returns . . . . .	189	152	283	308	245	263	319	226	189	6,596	
Deaths per Medical Returns . . . . .	189	140	275	298	227	244	283	215	183	6,254	
Omitted in Medical Returns . . . . .		12	8	10	18	19	36	11	6	342	

With regard to the causes of the 342 deaths thus omitted in the Medical Returns, we can supply no specific information. The greater part probably occurred at outposts under the treatment of civil practitioners, who furnished no detail of their cases to the medical authorities ; and a few of them no doubt originated in accidents, violence, or too suddenly to admit of medical treatment at all. The total of the deaths thus ascertained from the War Office Returns makes the mortality amount to 128 per thousand annually, and if to this be added the invalids who died on their passage home, or immediately after their arrival in this country, the average mortality from all causes will be increased to about 130 per thousand of the strength annually.

Even this ratio of mortality, high as it appears, is considerably under the mark, for the strength of the troops stated in the Medical Returns, which has necessarily been assumed as

the basis of our calculations, exceeds, by at least ten per cent., the average number stated to be serving in Jamaica by the War Office Returns. The difference arises from the Medical Returns taking the highest strength in the course of the year or quarter, instead of the mean monthly strength. Making the necessary correction for this error in the proper statistical basis, the ratio of mortality will be one-tenth higher, or 143 per thousand ; in other words, a seventh part of the force has died annually throughout the last 20 years.

This mortality has no doubt been greatly increased by four exceedingly severe and fatal epidemics of yellow fever, in 1819, 1822, 1825, and 1827, which it may be said are not likely, for a long series of years, to rage again with equal violence; but even in the most healthy years the climate of this island proves exceedingly fatal to our troops, as will be seen from the following comparison:—

Ratio of Mortality in Four of the healthiest years.				Ratio of Mortality in Four of the unhealthiest years.			
Years.	Strength per Medical Returns.	Deaths per War Office Returns.		Years.	Strength per Medical Returns.	Deaths per War Office Returns.	
1823	2,278	174		1819	2,531	790	
1828	2,536	189		1822	2,541	445	
1829	2,709	152		1825	2,512	802	
1836	2,985	189		1827	2,795	640	
Total .	10,508	704	or 67 per 1000	Total .	10,379	2,677	or 259 per 1000

Thus, even during the healthiest period of the last 20 years the mortality has been between four and five times as great as among troops in Britain, and in the unhealthy years nearly sixteen times as great. Even if we had excluded the four very unhealthy years altogether from our calculation, still the average rate of mortality would have been, during the other 16, upwards of 87 per 1000, or much the same as in the Windward and Leeward Command.

It may be necessary here to inquire whether the mortality in this island has, during the last 20 years, averaged higher than in the period immediately preceding. The returns forwarded to the War Office show that during the 14 years antecedent to 1817 it has been as follows:—

	1803	1804	1805	1806	1807	1808	1809	1810	1811	1812	1813	1814	1815	1816	Total.	Average.
Strength . . .	3,953	4,025	4,347	4,063	4,033	3,527	3,264	2,952	3,006	3,131	2,878	3,621	3,129	4,485	50,414	3,601
Deaths . . .	416	370	725	466	352	848	367	371	413	504	402	341	374	459	6,408	458
Ratio of Deaths per 1000 of Strength . . .	105	92	167	115	87	240	112	126	137	161	140	94	120	102	. .	127

During this period, therefore, the average mortality has been 127 per thousand of the mean strength, annually, or almost exactly the same as during the other years embraced in this Report; so that there seems to have been no amelioration whatever in the climate of Jamaica since 1803. This island has, even from a very early period, been noted for its extreme insalubrity. So far back as 1655 the deaths among the troops, during the sickly season, averaged 140 per week; and some years later, out of 800 who arrived, two-thirds died within a fortnight.

In Abstract No. XIII. of Appendix will be found a specific statement of every disease by which either an admission into hospital, or death, has been occasioned during the last 20 years, as reported by the medical officers, from which has been compiled the following Table, to exhibit the results in a more comprehensive form:—

	Admissions.		Deaths.	
	Total among whole force in 20 years.	Annual ratio per 1000 of mean strength.	Total among whole force in 20 years.	Annual ratio per 1000 of mean strength.
Fevers . . . . .	46,922	910	5,253	101·9
Eruptive Fevers . . . . .	10	$\frac{3}{10}$		
Diseases of Lungs . . . . .	4,357	84 $\frac{8}{10}$	388	7·5
„ Liver . . . . .	539	10	51	1·
„ Stomach and Bowels . . . . .	12,282	238	260	5·1
„ Brain . . . . .	720	14	137	2·6
Dropsies . . . . .	268	5	61	1·2
Rheumatic affections . . . . .	1,479	29	5	
Venereal affections . . . . .	1,021	20	1	
Ulcers and Abscesses . . . . .	9,667	187	18	
Wounds and Injuries . . . . .	6,164	120	21	2·
Punished . . . . .	3,285	64		
Diseases of Eyes . . . . .	4,644	90		
„ Skin . . . . .	337	6		
All other Diseases . . . . .	1,760	34	59	
Total as in the preceding table .	93,455	1,812	6,254	121·3

Table XXXVII. Showing the principal Diseases among the White Troops in Jamaica.

On comparing the above admissions with those at healthy stations, it will be observed, that in Jamaica not only are they twice as numerous, but nearly three-fourths are of that class which frequently prove fatal; whereas in Great Britain, or other temperate climates, scarcely a fourth part are of that description, being principally slight rheumatic or venereal affections. The number of admissions is consequently of little use in determining the relative salubrity of stations unless we also know the causes of them.

We shall now proceed to make a few remarks in regard to the several classes of diseases included in this Table.

### FEVERS.

Under this head are comprised in the preceding Table—

	Admissions.	Deaths.	Proportion of Deaths to Admissions.
Intermittent Fever . . . . .	6,090	37	1 in 165
Remittent . . . . .	38,393	5,114	1 in 8
Common continued . . . . .	1,971	86	1 in 23
Yellow Fever (Icterodes) . . . . .	20	15	1 in 1
Synochus . . . . .	448	1	1 in 448
Total . . . . .	46,922	5,258	1 in 9
Annual Ratio per 1000 of Mean Strength . . . . .	910	101.9	. .

This class of diseases, though only in a small degree more prevalent than in the Windward and Leeward Command, is nearly thrice as productive of mortality, in consequence of about three-fourths of the cases being of the remittent type, which is extremely fatal; whereas, in the other Command, little more than a fourth of the cases are of that description. Remittent fever, however, in Jamaica, does not appear to be more severe in its character than when it occurs in the Windward and Leeward Command, the proportion of deaths to recoveries being in both, 1 in 8, on the average of the whole 20 years.

Jamaica is however much more subject to this disease, in an epidemic form, than the other West India stations; and on such occasions it is often of an extremely fatal description, scarcely yielding to any mode of treatment. These epidemics principally prevailed in 1819, 1822, 1825, and 1827, and, at some stations and in some corps, raged with such severity that nearly one-half died of those attacked. A detailed account of their progress will be given when we come to investigate the extent of mortality at each station where they occurred. We shall here merely state that they appear without any warning, and often suddenly, at periods when the troops have for some time previous enjoyed a comparative immunity from disease. The lowest mortality throughout the whole of the Quarterly Returns, from which this Report has been prepared, was in the three months prior to June 1827, when 12 deaths only were reported. The next quarter remittent fever broke out, and among a diminished force the deaths amounted to 252 in the same period, without the thermometer indicating any further increase of temperature than about 3°, and without any remarkable change in the weather.

Several instances will be adduced in the course of this Report to show that these epidemics spared neither age, sex, nor condition of life; the temperate and the intemperate, the prudent and the thoughtless, fell victims to them in nearly an equal degree; and all sanitary precautions, save the immediate removal of the troops from the locality where they originated, seem to have had little or no effect in arresting their progress. Their appearance cannot be said to have been confined to any particular season of the year, for the results on this head are by no means uniform, though the preponderance of mortality has been greater during the last two than the first two quarters, as will appear from the total deaths stated in each Quarterly Report, during the years when they were most prevalent and fatal in the island.

	1819	1822	1825	1827	Total.
Died from 21st Dec. to 20th March	40	126	132	53	351
„ 21st March to 20th June	56	182	91	12	341
„ 21st June to 20th Sept.	413	55	242	252	962
„ 21st Sept. to 20th Dec.	245	76	312	319	952

We shall afterwards refer more minutely to this subject when we come to investigate the influence of the seasons generally on sickness and mortality in this Command.

Unlike the yellow fever of Gibraltar, one attack of the remittent fever of this country secures no immunity from a second; so far from that, the Returns show that 75 out of every hundred of the strength have been under treatment for it annually: that is, on the average, each man, whether resident for a long or a short period in the climate, has had an attack every 16 months. We shall hereafter refer to this fact, as affording one of the strongest arguments against the supposed advantages of seasoning by length of residence; for of what avail can that seasoning be which still leaves the soldier subject to the recurrence of this disease after so short an interval, or how can we suppose the possibility of his constitution

being improved by four attacks of this extremely severe and debilitating disease every five years?

Fevers of the intermittent type are by no means common or occasion much mortality in this island, though the low marshy situation of several of the stations, such as Fort Augusta, Falmouth, and Port Antonio, appear equally favourable to the production of them, as those stations in the Windward and Leeward Command, where they are exceedingly prevalent.

Fevers of the common continued type are still more rare, and occasion less mortality than in Great Britain. On referring to the general abstract of the diseases, it will be seen that there is a very arbitrary distinction in regard to those entered under the head of *Febris icterodes* (yellow fever); for though hundreds of cases occurred in which the patients died with black vomit, and all the worst symptoms of that disease, we find but 20 cases reported under that head. These were men brought from the outpost of Lacovia, where they had been attacked by fever of so aggravated a character, that 15 of them died within a few hours after their return to Fort Augusta. The common yellow fever of the country seems to have been, with that one exception, always entered as remittent. Eruptive fevers are so exceedingly rare in this climate, that only seven cases occurred among the white troops in the whole course of 20 years, three of which were of small pox and four of measles, and none proved fatal.

### DISEASES OF THE LUNGS.

Under this head are comprised in the preceding Table—

	Admitted.	Died.	Proportion of Deaths to Admissions.
Inflammation of the Lungs. . . . .	697	15	1 in 46
Pleurisy . . . . .	29	0	0 in 29
Spitting of Blood. . . . .	108	12	1 in 9
Consumption . . . . .	661	315	1 in 2
Acute Catarrh . . . . .	2,438	18	1 in 135
Chronic Catarrh . . . . .	371	23	1 in 16
Asthma . . . . .	41	3	1 in 14
Difficulty of Breathing. . . . .	12	2	1 in 6
Total . . . . .	4,857	388	1 in 11
Annual ratio per 1000 of Mean Strength . . . . .	85	7.5	. .

This class of diseases has been about one-third less prevalent, and one-third less fatal than in the Windward and Leeward Command. We find, however, that, exclusive of those invalided for this cause in Jamaica, and who died on their passage home, or shortly after their arrival, constituting a very numerous class, it has produced almost exactly the same annual ratio of mortality as among the Dragoon Guards and Dragoons in the United Kingdom on the average of the last seven years. As an instance how much more prevalent consumption is in that country than in Britain, we may state that of an aggregate strength of 51,567, serving in Jamaica, there have been 661 treated for that disease, being at the rate of 13 per thousand annually; while out of an aggregate strength of 44,611 dragoon guards and dragoons, serving in the United Kingdom, there have been treated only 286, or between 5 and 6 per thousand annually, and that, too, though the period over which the latter observations extend, includes two severe epidemics of influenza, which, no doubt, laid the foundation of more cases of this disease than usually occur in this country.

This fact is the more remarkable, as in Jamaica catarrhal affections are not one-half so common as in Britain. Out of an aggregate strength of 51,567, there occurred but 2,809 cases, including both acute and chronic, or 55 per thousand of the strength annually; whereas in this country, out of an aggregate strength of 44,611, no less than 5,462 cases are recorded, or 122 per thousand annually. Inflammation of the lungs is still more rare.

The baneful influence of the climate of the West Indies in accelerating the progress of consumption has been often remarked by the medical authorities; but it does not seem to have occurred to them, nor indeed had they any means of ascertaining, that at least twice as many cases of it originate in that climate as at home, though those catarrhal affections to which they are generally attributed are there comparatively so rare.

### DISEASES OF THE LIVER.

Under this head are comprised in the preceding Table—

	Admitted.	Died.	Proportion of Deaths to Admissions.
Acute Inflammation of the Liver . . . . .	336	27	1 in 12
Chronic ditto . . . . .	109	20	1 in 5
Jaundice . . . . .	94	4	1 in 23
Total . . . . .	539	51	1 in 11
Annual ratio per 1000 of Mean Strength . . . . .	10	1	. .



Considering the high degree of temperature in this island, this class of diseases is by no means very prevalent or fatal; it is only half as much so as in the Windward and Leeward Command, and compared with troops in Britain, the ratio of admissions is as 10 to 8, and the deaths as 1 to  $\frac{1}{10}$ ths. Many parts of this island, as will be afterwards shown, enjoy a remarkable immunity from these diseases.

### DISEASES OF THE STOMACH AND BOWELS.

Under this head are comprised in the preceding Table—

	Admitted.	Died.	Proportion of Deaths to Admissions.
Abdominal Inflammation . . . . .	2	1	1 in 2
Inflammation of the Stomach . . . . .	42	4	1 in 10
Ditto of the Bowels . . . . .	52	11	1 in 5
Vomiting of Blood . . . . .	9	4	1 in 2
Acute Dysentery . . . . .	4,473	114	1 in 40
Chronic Dysentery . . . . .	436	70	1 in 6
Indigestion . . . . .	579	5	1 in 116
Colic . . . . .	1,107	4	1 in 277
Obstipation . . . . .	196	2	1 in 98
Cholera Morbus . . . . .	216	3	1 in 72
Diarrhœa . . . . .	5,169	42	1 in 123
Cancer of the Stomach. . . . .	1	.	0 in 1
Total .	12,282	260	1 in 47
Annual ratio per 1000 of Mean Strength . . . . .	238	5.1	

The ratio of admissions into hospital by this class of diseases is only about one-half, and the deaths scarcely one-fourth part as high as in the Windward and Leeward Command. Dysentery and diarrhœa, in particular, appear in a much more mild and tractable form, and the troops, at several of the stations, are almost entirely exempt from them. This may in some measure be owing to their having twice as much fresh provisions as those in the Windward and Leeward Command, which, if it does not prevent the occurrence of the disease, may obviously have a very material effect in modifying its virulence by supplying a more digestible and less irritating diet than salt meat.

This class of disease varies very materially in different years; in some the deaths have been as low as  $2\frac{1}{2}$  per 1000 of the strength; in others they have been thrice as high, and the admissions in a corresponding proportion. In several instances this has been the case, without there being any marked change in the degree of temperature, fall of rain, or other atmospheric phenomena, to which the increase of the disease could readily be attributed. None of the cases of cholera morbus were of the epidemic form, which has within the last few years committed such ravages at other stations.

### DISEASES OF THE BRAIN.

Under this head are comprised in the preceding Table—

	Admitted.	Died.	Proportion of Deaths to Admissions.
Inflammation of the Brain . . . . .	31	13	2 in 5
Headache . . . . .	6	0	0 in 6
Stroke of the Sun . . . . .	6	2	1 in 3
Apoplexy . . . . .	93	53	1 in 2
Paralysis . . . . .	33	7	1 in 5
Epilepsy . . . . .	258	19	1 in 14
Fatuity . . . . .	39	1	1 in 39
Madness . . . . .	62	0	0 in 62
Brain Fever of Drunkards . . . . .	192	42	2 in 9
Total .	720	137	1 in 5
Annual ratio per 1000 of Mean Strength . . . . .	14	2.6	.

So large a proportion of the admissions and deaths by this class of diseases arises directly from drunkenness, that before comparing these results with those obtained for a like number of troops in Great Britain, it becomes necessary to deduct the cases of *delirium tremens*, (brain fever of drunkards), which will reduce the admissions to about 10, and the deaths below 2 per 1000 of the strength annually, being more than double what occurs from the

same cause in Great Britain. Numerous as are the cases of *delirium tremens* in this island, they are, however, scarcely one-third as much so as in the Windward and Leeward Command, where more fall victims to their own imprudence, from this cause alone, than die in Jamaica by all diseases of the brain together. Thus soldiers must either have less facilities for intemperance in that island, or it does not there produce so prejudicial an effect.

### DROPSIES.

Under this head are comprised in the preceding table—

	Admitted.	Died.	Proportion of Deaths to Admissions.
Subcutaneous Dropsy . . . . .	122	25	1 in 5
Abdominal Dropsy . . . . .	138	32	1 in 4
Water in the Chest . . . . .	8	4	1 in 2
Total .	268	61	1 in 4½
Annual ratio per 1000 of Mean Strength . . . . .	5	1·2	. .

Notwithstanding the greater prevalence of fevers in Jamaica, of which this class of diseases is said often to be the sequel, the proportion of admissions and deaths is little more than half as high as in the Windward and Leeward Command. Compared with troops in Great Britain, however, the admissions and deaths are nearly as 4 to 1.

The other classes of diseases offer little worthy of remark. The mortality is so low as to be scarcely appreciable; and it will, therefore, perhaps, be sufficient to contrast the number of admissions annually, among 1000 troops at this station, with what occurs among the same number in Great Britain, or the Windward and Leeward Command.

	Admissions per 1000 of the Force, Annually,		
	In Jamaica.	In Windward and Leeward Command.	In Great Britain.
From Rheumatic Affections. . . .	29	49	50
Veneral Affections . . . .	20	35	181
Ulcers and Abscesses . . . .	187	204	133
Wounds and Injuries. . . .	120	129	126
Diseases of the Eyes . . . .	90	89	19
"    Skin . . . .	6	6	29
Punished . . . . .	64	50	8

Thus in Jamaica rheumatic affections are much less prevalent than in the Windward and Leeward Command, or in Great Britain, and there is a still more striking exemption from all forms of venereal; the other classes of diseases seem to be equally numerous throughout the two West India Commands.

It will be observed that the proportion corporally punished in Jamaica is nearly eight times as high as in Great Britain; but the latter ratio has been taken on the average of the last seven years only, during which corporal punishment has been considerably restricted in this country, while the former extends over 20 years, during which it was much more common. The following Table will show the gradual decrease of this species of punishment, by reference to the proportion of the strength corporally punished in each year since 1817:—

	1817	1818	1819	1820	1821	1822	1823	1824	1825	1826	1827	1828	1829	1830	1831	1832	1833	1834	1835	1836	Total.	Average.
Number corporally punished . . . . .	635	466	267	210	269	185	240	137	69	59	112	99	89	104	40	54	70	80	76	24	3,285	164
Ratio per 1000 of Strength corporally punished	193	198	105	110	103	73	105	51	27	29	40	39	33	37	18	26	25	26	27	8	..	64

Thus, though the extent of corporal punishment has, on the average of these 20 years, so much exceeded that of troops in Great Britain, it has, during the last year, been reduced to exactly the same ratio, viz., 8 per 1000, being only one twenty-fourth part as high as in the first two years included in this Report.

Having completed these details regarding the sickness and mortality among the white troops, it is now necessary we should refer to those of the colonial troops serving in this island.

BLACK TROOPS AND PIONEERS.

It is to be regretted that the materials for estimating the influence of the climate of this Island on the constitution of black troops are by no means so ample as in the Windward and Leeward Command. We have already stated that in Jamaica they consist entirely of military labourers, with the exception of a small detachment of one of the West India regiments. These labourers being less under medical superintendence than regular corps, it is only when their disease begins to assume a serious, or perhaps fatal aspect, that they come into hospital; at least we are led to suppose so from the extremely low ratio of admissions, as compared with the deaths, in the following Table, of which the particulars will be found in Abstract No. XIII. of Appendix.

Table XXXVIII.  
Showing the admissions into Hospital, and Deaths among the Black Troops serving in Jamaica.

Years.	Strength.	Admissions.	Deaths.	Ratio of Admissions per 1000 of mean Strength.	Ratio of Deaths per 1000 of mean Strength.
1817	600	483	27	805	45
1818	643	275	23	428	36
1819	322	142	11	440	34
1820	216	92	10	425	46
1821	216	89	9	412	42
1822	197	80	5	406	25
1823	189	46	7	243	37
1824	229	41	9	179	39
1825	225	41	4	182	18
1826	255	61	12	238	47
1827	228	61	10	269	44
1828	187	38	3	202	16
1829	214	37	6	173	28
1830	284	80	4	281	14
1831	265	76	12	287	45
1832	250	85	2	340	8
1833	336	81	5	241	15
1834	328	27	2	106	8
1835	236	53	8	225	13
1836	309	47	8	152	26
Total	5,729	1,935	172	..	..
Average	286	92	9	338	30

Thus it appears that the mortality among this class of troops in Jamaica is but 30 per thousand of the strength annually; so that the climate must be much more favourable to their health than that of the Windward and Leeward Command, where the mortality among the negro troops was ascertained to have been 40 per thousand, on the average of the same series of years.

The superior salubrity of this climate for the negro race is corroborated by the mortality of the slave population being only 25 per 1000 of all ages, while throughout the Windward and Leeward Command it is 31 per 1000 of all ages. Thus, both in regard to black troops and the slave population, the mortality is about one-third less in Jamaica.

By an estimate which has been made of the mortality among this class of troops, from 1803 to 1817, it appears during that period to have averaged 49 per thousand annually; but as the garrison at Honduras was then generally included in the returns of Jamaica, this affords no accurate standard of comparison with the mortality in the above table, which refers to Jamaica alone.

From the high ratio which the deaths, in almost every instance, bear to the admissions, there can be little doubt that all the slight cases of sickness have been omitted; we therefore decline drawing any conclusions as to the relative prevalence of each class of diseases, and shall confine ourselves to the following specification of the mortality:—

Table XXXIX.  
Showing the principal fatal Diseases among Black Troops in Jamaica.

	Total Deaths in 20 Years.	Ratio of Deaths per 1000 of Mean Strength.
By Fevers . . . . .	47	8.2
Eruptive Fevers . . . . .	3	.5
Diseases of Lungs . . . . .	59	10.3
,, Liver . . . . .	2	.4
,, Stomach and Bowels . . . . .	17	3.
,, Brain . . . . .	4	.6
Dropsies . . . . .	17	3.
All other Diseases . . . . .	23	4.
Total . . . . .	172	30.

It is worthy of notice, as in some degree corroborative of the accuracy of our results, that those diseases which create greater mortality among the white troops in Jamaica than in the Windward and Leeward Command are found, by the preceding table, to produce a corresponding effect upon the black troops there, and those which occasion less mortality among the former likewise do so among the latter, and that too in very nearly the same degree.

For instance, the mortality by fevers, as we have already stated, is nearly three times as great among the whites in this island as in the Windward and Leeward Command; and the preceding table shows it to be also about double among the black troops there. The mortality by diseases of the lungs, of the liver, and of the brain, is considerably less among the white troops than in the Windward and Leeward Command; and in almost exactly the same degree are these diseases less fatal among the black troops. The mortality by diseases of the bowels among the white troops, too, is only about a fourth part of that from the same class of diseases in the Windward and Leeward Command, and a similar exemption appears by the preceding table among the black troops, though not in quite so great a degree. The only class of diseases in which this uniformity does not prevail is dropsies, and these being so frequently the consequence of other diseases, perhaps a similar degree of uniformity was scarcely to have been expected.

Having completed this investigation into the sickness and mortality among both white and black troops, serving throughout the Command, it next becomes necessary to ascertain the relative salubrity of each of the stations where these troops are quartered, in order that if one part of the island be found to possess a marked superiority in this respect over another, it may serve as a guide for the selection of localities, where the troops will be exposed to the least risk of life and deterioration of constitution during their service in that country. The subject is one of so great importance that we have devoted to it every possible attention; and though, owing to the frequent changes of the troops from station to station, and the incomplete state of the returns, at times when the medical officers fell victims to the prevailing epidemics, there may be some trifling inaccuracies which it is impossible for us to correct, yet we feel confident that, on the whole, the annexed results will afford a fair estimate of the mortality which has occurred at each station during the last 20 years, as well as the diseases by which it has been occasioned.

We have first taken the stations on the south, and then those on the north sides of the island, prefixing to the details of the mortality at each, a slight topographical description of the locality, without which it would be impossible to make this portion of our investigation available as a guide in the selection of more healthy positions in future.

First in importance of the stations on the south side of the island is

#### UP-PARK CAMP.

THIS station is about two miles north of the sea-port of Kingston, and lies at the eastern extremity of a well-cultivated and fertile plain, having a gradual slope towards the sea. About a mile to the north is a mountain ridge, the foot of which is slightly wooded, and four or five miles to the eastward extends another of greater elevation, but of which the surface is clear and open. There is no marshy or swampy ground nearer than three or four miles, and the soil is of so absorbent a nature, that it is necessary to dig to a considerable depth before water can be procured.

*Up-Park Camp.*

The Camp is elevated 200 feet above the level of the sea, and enjoys the advantage of a regular sea and land breeze, the former during the day, and the latter during the night, which reduces the temperature considerably below what prevails at most of the other stations. The buildings occupied by the troops are raised on arches, well ventilated, and consist of three ranges, those for the officers in front, for the men in the centre, and for the hospital in rear. The barracks are of brick, two stories high, the hospital of the same material, but of one story and a basement, with balconies all round. Adjoining to the barracks is an extensive bath for the use of the troops, and the whole is surrounded by a wall and pallsading. The buildings and adjacent grounds occupy nearly 220 acres.

Notwithstanding these apparent advantages both in site and accommodation, the troops at this station have at times been subject to extraordinary mortality, as will appear from the following Table:—

Table XL.  
Showing the annual  
ratio of Mortality of  
troops at Up Park  
Camp.

Years.	Strength.	Deaths.	Ratio of Deaths per 1000 of Mean Strength.
1817	1,392	115	83
1818	1,171	76	65
1819	914	458	501
1820	728	117	160
1821	1,113	145	130
1822	379	168	443
1823	269	22	82
1824	582	26	45
1825	607	207	341
1826	445	32	72
1827	867	195	225
1828	480	57	118
1829	509	22	43
1830	609	73	120
1831	691	76	110
1832*	725	66	91
1833	652	51	78
1834	690	48	70
1835	840	44	52
1836	857	44	51
Total	14,520	2,042	. .
Average	726	102	140·6

From this table, then, it appears that the mortality has on the whole been considerably above the average of the island; and on some occasions so fatal did this station prove to the troops, that, in 1819 and 1822 nearly a half, in 1825 a third, and in 1827 about a fourth, of the garrison were swept off.

The diseases whereby the mortality in each year has been occasioned, are detailed in Abstract, No. XIV. of Appendix, whercof the totals for the whole period have been arranged in classes as follow:—

Table XLI.  
Showing the prin-  
cipal fatal Diseases  
of troops at Up-  
Park Camp.

	Total Deaths in 20 Years.	Ratio of Deaths Annually per 1000 of Mean Strength.
By Fevers . . . . .	1,754	120·8
Eruptive Fevers . . . . .	3	·2
Diseases of Lungs . . . . .	124	8·5
" Liver . . . . .	11	·8
" Stomach and Bowels . . . . .	84	5·8
" Brain . . . . .	30	2·
Dropsies . . . . .	11	·8
All other Diseases . . . . .	25	1·7
Total . . . . .	2,042	140·6

From this it appears that the principal source of mortality at this station, beyond what prevails elsewhere throughout the island, is fever, of which it experienced several extremely fatal epidemics; the particulars of these we shall now proceed to detail.

The 50th regiment was sent to this station on its arrival in the island in March, 1819, and the 92nd regiment on its arrival in June following. In the early part of that year the epidemic, or yellow fever, had shown itself to a considerable extent both here and at Port Royal, and in the end of June several cases appeared in these newly arrived corps. As it was supposed this might have been occasioned by their being overcrowded, detachments were sent to Stoney Hill and Fort Augusta; but, notwithstanding this precaution, by the end of July the fever had rapidly increased, and continued to rage with such appalling violence during the greater part of August, that scarcely a man of either corps escaped being attacked by it, and nearly one-half their number perished. The garrison was then entirely broken up and removed to Stoney Hill, Fort Augusta, and His Majesty's Ship *Serapis*, a sufficient guard only being left to take charge of the stores. In the middle of November the troops were landed from the *Serapis*, and the garrison re-assembled from Fort Augusta and Stoney Hill. The disease continued, but with diminished virulence, till December, when it disappeared at this station.

That this disease spared neither age, sex, nor condition, is pretty evident from the following

\* The sick at Kingston having, it is understood, been sent to Up-Park Camp since the beginning of 1832, the deaths among them must be included in this Table, and the strength of the detachments are therefore added to the force at Up-Park Camp. Prior to 1832, the sick from Kingston were sent to Fort Augusta, in the details of which station the same rule has been observed.

abstract of the deaths caused by it in each corps at this and the other stations to which they were sent in the course of the year.

92d Foot.	Strength.	Died.	50th Foot.	Admitted.	Died.
Commissioned Officers	27	10	Commissioned Officers	30	11
Officers' wives. . .	5	4	Soldiers . . . .	769	231
Soldiers . . . .	650	275	Soldiers' wives. . .	90	30
Soldiers' wives. . .	60	29	Soldiers' children . .	50	33
Soldiers' children . .	70	38			

We cannot furnish the strength of each class in the 50th regiment, nor the admissions of each class in the 92nd regiment, but the above is sufficient to establish that all suffered in nearly an equal degree. The proportion of admissions to deaths was about 1 in 3, and the number of admissions considerably exceeded the whole strength, so that several must have been attacked twice.

That advanced age, hardy constitution, or previous service in a warm climate had no effect in counteracting the operation of this disease, is sufficiently apparent from the fact that the 92d regiment, composed of hardy veterans who had served through the Peninsular Campaign, suffered considerably more than the 50th, composed, with the exception of 40, of young men recently enlisted.

Though several detachments of both corps were sent from this station to Stoney Hill between July and October, the disease did not manifest itself there till November, and then did not prove quite so fatal as at this station.

The greater part of that year was exceedingly sultry, there was a want of the usual supply of the early rains, and the country is described as being much parched up when the fever broke out; but the changes of temperature or moisture which took place during the months in which it prevailed, seem to have had no perceptible effect in diminishing either its prevalence or intensity.

In the latter end of 1821, and beginning of 1822, the epidemic fever prevailed among three companies of the 50th regiment at this station to so great an extent, that about a fourth part of them was cut off: no detail is given of the circumstances under which it commenced, or of the state of the weather at that period, from which we may conclude there was nothing remarkable in either. In July these companies were marched to Stoney Hill to make way for the head-quarters of the 33rd and 91st regiments, then just arrived from England, who immediately began to fall victims to the same fatal disease; for between their arrival and the middle of May, when they were all removed from the station, the number attacked nearly equalled the whole strength of the garrison, and of these 155 died. In this instance, too, it was strikingly exemplified that neither age, sex, nor condition, could boast of any exemption, as will appear from the following details:—

*The 33d lost*

4 Officers out of 21.  
8 Women out of 57.  
17 Children out of 74.  
67 Soldiers out of about 250.  
There were four companies at Stoney Hill out of the range of the epidemic.

*The 91st lost*

4 Officers out of 20.  
8 Women out of 71.  
10 Children out of 62.  
88 Soldiers out of about 350. .  
There were two companies at Stoney Hill out of the range of the epidemic.

This epidemic prevailed also to a considerable extent at Spanish Town and Port Royal, but for its effects there we must refer to the returns of these stations.

The fever of 1825, which cut off a third part of the troops at this station, did not originate here, but seemed rather to have been a sequence of that which broke out with such violence at Stoney Hill, and prevailed so generally throughout the island. The principal circumstance worthy of remark in regard to it was, that at Stoney Hill it broke out about the middle of February after a long continuance of dry sultry weather, when the ground was excessively parched, and as the drought increased, so did the disease; whereas at Up-Park Camp it broke out in the month of June after the rains had commenced, and continued with unabated severity during a period when more rain fell than had been witnessed for 20 years previous, and as the rain increased so did the disease.

The epidemic of 1827, by which about a fourth part of this garrison was cut off, commenced at Fort Augusta, where it raged with great violence during the month of August, and subsequently extended itself to Up-Park Camp: the particulars of its origin and progress will be found in the details of Fort Augusta.

The other diseases at this station offer no peculiarity worthy of remark, being much the same as the general average throughout the island.

PORT ROYAL.

THIS town is built at the south-west extremity of a narrow sandy peninsula, about ten miles in length, which runs across the harbour of Kingston, and protects it from the sea. The ground in the vicinity of the town is a perfect level, often covered with water during heavy rains or high tides, and the soil is of gravel and sand. Its nearly insular position secures

Port Royal.

free ventilation and a reduced temperature rarely subject to sudden alternations. The sea breeze coming direct from the ocean is very refreshing, and the land wind having to pass over that tract of salt water which forms the harbour of Kingston ere it can reach the station, is nearly equally so. Comparatively little rain falls here, and from the nature of the soil it is readily absorbed.

The barracks stand at the very extremity of the peninsula on which the town is built, only three feet above the level of the sea, and frequently at high water a great portion of the parade-ground is inundated by the tide. The hospital is in a narrow street leading from the town to the barracks, and consists of a ground floor and upper story divided into six wards with balconies in front and rear.

The mortality among the troops at this station during the last 20 years, has been as under:—

Table XLII.  
Showing the annual  
ratio of Mortality of  
Troops at Port  
Royal.

Years.	Strength.	Deaths.	Ratio of Deaths per 1000 of mean Strength.
1817	254	10	39
1818	200	10	50
1819	272	86	316
1820	257	15	58
1821	262	59	225
1822	278	57	205
1823	312	26	83
1824	250	25	100
1825	293	94	321
1826	234	22	94
1827	283	44	155
1828	281	5	18
1829	268	22	82
1830	283	42	148
1831	237	8	34
1832	156	5	32
1833	257	10	39
1834	205	22	107
1835	252	9	36
1836	234	2	9
Total	5,068	573	..
Average	254	29	113.1

Thus during the above period the average mortality has been about 113 per thousand of the strength annually; but it exhibits remarkable variations at different periods. Last year it was less than 1 per cent., while in 1825, about a third part of the force was cut off; thus demonstrating how difficult it is to form any fair estimate of the influence of these climates, except on the average of a long series of years. This station suffered very severely from the epidemic fevers which raged throughout the island in 1819, 1822, and 1825. A large proportion of the force also was cut off in 1821, when most of the other stations were comparatively healthy.

The diseases by which the deaths in each year have been occasioned, are detailed in Abstract, No. XV. of Appendix, of which the totals for the whole period have been arranged in classes as follow:—

Table XLIII.  
Showing the principal  
fatal Diseases  
of Troops at Port  
Royal.

	Total Deaths in 20 Years.	Ratio of Deaths Annually per 1000 of Mean Strength.
By Fevers . . . . .	476	93.9
Diseases of Lungs . . . . .	37	7.3
"    Liver . . . . .	8	1.6
"    Stomach and Bowels . . . . .	30	5.9
"    Brain . . . . .	12	2.4
Dropsies . . . . .	3	.6
All other Diseases . . . . .	7	1.4
Total . . . . .	573	113.1

On comparing the ratio of deaths by each of the above classes of diseases with that which has prevailed generally throughout the island, there appears little difference in any except fevers, which have been rather under the average, particularly since 1830; and so irregular has been their operation, that, though in 1819 and 1825 they cut off a third part of the force, in 1831 not a death took place from them.

## FORT AUGUSTA.

*Fort Augusta.*

THIS Fort lies about four miles from Kingston, and nearly an equal distance from Port Royal; it is built on the extremity of a low neck of land or peninsula, forming the north-west boundary of Port Royal Harbour, and almost surrounded by the sea. In the vicinity, indeed almost under the very walls of the Fort, is an extensive marsh or lagoon, through which the river Cobre, a sluggish stream, empties itself. This marsh is interspersed with several small islets covered with mangrove bushes, and abounding in every species of decayed vegetation, from which issue most offensive effluvia when the wind comes from that quarter.

The soil of the peninsula is sandy, and has a coral formation for its base; the barrack consists of a stone building two stories high, but not arched or raised from the ground, owing to which, it is said a larger proportion of sick comes from the under story. The hospital is built in the lowest part of the Fort, and is liable to the same defect of not being raised from the ground.

The atmosphere of Fort Augusta is rather more humid, but the heat, as shown by the thermometer, is much the same as at the other stations in the vicinity, though from its nearly insular position, less liable to sudden alternations. The Fort enjoys the advantage of a pure and regular sea-breeze, from nine in the morning till six in the evening, when the land wind commences, and continues till six in the morning; there is then generally a cessation of both, during which period it is sultry and oppressive.

Prior to 1832 this garrison furnished a detachment of two companies for the duty of Kingston, from which the sick were sent to the Fort; it has therefore been necessary during that period to include the strength of this detachment, along with that of the garrison, in the following Table of the mortality :—

Years.	Strength.	Deaths.	Ratio of Deaths per 1000 of Mean Strength.
1817	440	15	34
1818	518	17	33
1819	300	31	103
1820	325	30	92
1821	384	17	44
1822	369	19	51
1823	476	15	31
1824	527	43	81
1825	368	21	58
1826	494	30	61
1827	526	147	280
1828	439	37	84
1829	369	26	70
1830	642	27	42
1831	403	32	79
1832	165	4	24
1833	233	13	56
1834	313	16	51
1835	213	15	70
1836	282	17	60
Total .	7,786	572	..
Average	389	29	73.5

Table XLIV.  
Showing the annual  
ratio of Mortality of  
Troops at Fort  
Augusta.

The deaths, as shown by this table, have averaged 73½ per thousand of the strength annually; but this, though so much lower than the general average of the island, is greatly beyond what is attributable to the climate of Fort Augusta. Kingston, to which the detachment before mentioned has been furnished from this garrison, is one of the most unhealthy quarters in the island; and a very great portion indeed of the deaths recorded in the above table originated there; we have been able to trace and deduct not fewer than 56 of these in the year 1825 alone, but in none of the other years could we effect any accurate separation, and can therefore only recommend it to be kept in view, that the two companies at Kingston always furnished more fatal cases than the four which were at Fort Augusta, and with the proper correction on that principle, the mortality there cannot have exceeded 5 per cent. annually. Though its locality is apparently so unfavourable, Fort Augusta has, long antecedent to the date of this Report, been esteemed one of the healthiest stations in the island. Taking the average of four years and a half, between 1789 and 1794, the mortality was as low as 3 per cent., and with the exception of one year, 1827, it has almost uniformly maintained that healthy character ever since.

The diseases whereby the deaths in each year have been occasioned, are detailed in Abstract No. XVI. of Appendix, of which the totals for the whole period have been arranged in classes as follow :—



Table XLV.  
Showing the principal fatal Diseases of Troops at Fort Augusta.

	Total Deaths in 20 Years.	Ratio of Deaths Annually per 1000 of Mean Strength.
By Fevers . . . . .	433	55.5
Diseases of Lungs . . . . .	75	9.7
„ Liver . . . . .	2	0.3
„ Stomach and Bowels . . . . .	26	3.3
„ Brain . . . . .	10	1.3
Dropsies . . . . .	5	0.7
All other Diseases . . . . .	21	2.7
Total . . . . .	572	73.5

The mortality by fevers, even including the large proportion from Kingston, is only half the general average of the island; while the epidemics of 1819, 1822, and 1825, were raging in the vicinity, this station in a great measure escaped their influence, and it was only by that of 1827 that it suffered severely. The 84th regiment arrived here in February of that year, and enjoyed such a remarkable degree of health, that only one death took place in the whole corps in six months; but in July, fever began to show itself among them, without any apparent cause to induce it, except that the barracks were rather crowded at the time. In the hope of checking its progress by better accommodation, a part of the corps was sent to Up-Park Camp, and this change at first seemed to have a good effect, but towards the middle of August, sickness rapidly increased, and numbers daily became its victims. The Fort was then evacuated, and the troops moved to an encampment at Airey Castle, a few miles off, which had some effect in checking the disease; but unfortunately wet boisterous weather set in, the tents were blown down, and the sick being exposed for several hours to its inclemency, twenty of them perished in one night; temporary huts were afterwards erected, and so soon as the troops were comfortably accommodated in them, the disease disappeared. During the short time it continued at its height, it proved more rapidly fatal than on any previous occasion, 112 having been cut off out of about 300, in the short space of one month. When the disease abated here, it broke out with renewed violence at Up-Park Camp and Stoney Hill, where it proved nearly as fatal.

After the return of the corps to the Fort, several cases again occurred, but at length the disease gradually disappeared. On this occasion there was an apparent exemption in favour of the women, children, and officers, only about a fifth of them having been cut off, while there were about two-fifths of the men; but so many changes in the quarters of the corps took place at this period, that we have no means of knowing whether they were all equally exposed to the exciting cause of the disease.

Notwithstanding the equable temperature, diseases of the lungs prove considerably more fatal here than at most other stations in the island, while those of the bowels are proportionably lower; without there appearing any cause to which such peculiarities can be traced.

Out of 572 deaths, only two have occurred by diseases of the liver, an extremely low proportion indeed. On such a large range of numbers, this is not likely to have been the effect of chance, and we may therefore safely conclude the climate of this station to be highly favourable to recovery from such diseases.

## SPANISH TOWN.

### Spanish Town

THIS town, the capital of Jamaica, lies about five or six miles distant from the sea, and 16 from Kingston; it is situated at the eastern extremity of an extensive plain, surrounded by mountains on the north and north-west, and by uncultivated waste tracts of land on the south and west. The mountains to the north approach within a few miles of the town, and form part of a lofty chain intersecting the island, and of great elevation. Those to the westward and eastward are a continuation of the same range, but less elevated, and form gentle undulations to the southward, where they run into the plain. The town is said to be extremely dirty, badly drained, and whether from that or its situation, the inhabitants are at all times very subject to febrile diseases. The Cobre, a sluggish river of considerable depth, passes at the distance of about a quarter of a mile. The soil in the immediate neighbourhood, which is of a clayey tenacious nature, is barren and unproductive, and after heavy rains produces partial swamps. The country as far as the foot of the mountains being a dead level, and no artificial means employed to carry off the superabundant moisture, it remains until evaporated by the sun's rays, and when the land-winds blow over the ground thus saturated, they are supposed to have considerable influence in the production of fevers.

The sea-breeze, which tends so much to modify the heat at other stations, is here very irregular, indeed from August to October it is often scarcely perceptible; the temperature during the day is consequently much higher than at the other stations; but at night, a cold wind sets in from the mountains, which often reduces the thermometer twenty degrees in

the course of a few hours, and though pleasant, causes too rapid a transition to be beneficial to the constitution.

The barrack at this station consists of a brick building about 200 feet in length by 40 in breadth, and three stories high, the two upper ones divided into rooms for the soldiers, with separate accommodation at each end for the non-commissioned officers, the lower one unoccupied. The hospital is also of brick, two stories high, the under one used for stores, the upper divided into wards, with a surgery and offices at either end; the whole enclosed by a high wall, which serves to confine the men to barracks, but of course has the disadvantage, in a crowded town, of materially impeding ventilation.

The troops quartered here have been extremely unhealthy, and that not in occasional years only, but almost uniformly, as will appear by the following Table :—

Years.	Strength.	Deaths.	Ratio of Deaths per 1000 of Mean Strength.
1817	352	45	128
1818	262	73	278
1819	352	24	68
1820	318	87	273
1821	450	41	91
1822	433	105	242
1823	275	55	200
1824	290	60	207
1825	361	144	399
1826	269	50	186
1827	371	61	164
1828	364	30	82
1829	389	20	51
1830	363	45	124
1831	297	70	236
1832	353	20	57
1833	403	27	67
1834	309	48	155
1835	258	50	194
1836	250	36	144
Total	6,719	1,091	..
Average	336	55	162·4

Table XLVI.  
Showing the annual  
ratio of Mortality  
of troops at Spanish  
Town.

Thus the mortality, during this period, has averaged 162 per thousand of the strength annually; on no less than seven different occasions, between a fourth and fifth part of the whole force was cut off in the course of the year, and in 1825, the ratio of mortality amounted even to two-fifths of the strength.

This station has always been remarkably fatal to European troops; even so far back as 1780 its extreme insalubrity was pointed out and commented on by the medical authorities, who stated that at least a third part of the garrison died annually. From estimates which have been made of the relative salubrity of the different stations, founded on some old returns, between 1794 and 1797, it appears at that period also to have been the most unhealthy station in the island, except Montego Bay.

The diseases whereby the deaths in each year have been occasioned, are detailed in Abstract No. XVII. of Appendix, of which the totals for the whole period have been arranged in classes as follow :—

	Total Deaths in 20 Years.	Ratio of Deaths Annually per 1000 of Mean Strength.
By Fevers . . . . .	948	141·1
Diseases of Lungs . . . . .	61	9·1
" Liver . . . . .	2	0·3
" Stomach and Bowels . . . . .	32	4·8
" Brain . . . . .	25	3·7
Dropsies . . . . .	11	1·6
All other Diseases . . . . .	12	1·8
Total . . . . .	1,091	162·4

Table XLVII.  
Showing the prin-  
cipal fatal Diseases  
of troops at Spanish  
Town.

On comparing the above with the general average through the whole island, the excess of mortality is to be found principally under the class of fevers. It would lead us much beyond the limits to which we are bound to confine these observations, were we to enter into full details of the ravages of this disease, at each period when it prevailed at this station; we shall therefore merely remark, that it seldom appeared in the island without

showing itself here in a very aggravated form, and was exceedingly prevalent and fatal, even at times when all the other stations were comparatively healthy.

On comparing the other diseases with the general average throughout the island, it will be observed that those of the brain are nearly twice as high, but this arises entirely from the large proportion of deaths by *delirium tremens* induced by drunkenness, for which probably this capital affords greater facilities than most of the other stations.

There is a very remarkable exemption here from diseases of the liver: out of 1091 deaths in twenty years, two only have been from this cause: we cannot trace any peculiarity of climate to which this may be attributable, but a knowledge of the fact is of considerable importance to the medical officers in this island, as tending to show what localities are most favourable to these diseases.

The mortality at this station, instead of diminishing, seems to be rather on the increase, particularly during the last three years, when the rest of the island was comparatively healthy: there is obviously something in its locality peculiarly inimical to the constitution of European troops.

### STONEY HILL.

#### Stoney Hill.

THIS post is situated about nine miles from Kingston, on a lofty eminence in the Liguanea Mountains, 1360 feet above the level of the sea, commanding the grand pass which there intersects the island from north to south. The hill on which the barracks are built is flat on the top, and lies between the ends of two high mountain ridges, that in the south-east, upwards of 3000 feet high, the other, on the west, considerably lower. The parade and buildings occupy a space of twenty acres; the barracks consist of three detached stone buildings of two stories each, erected on small eminences, with a basement below to secure them from the damp, and verandahs on the south front. The hospital is a quadrangular stone building on the east of the barracks, and consists also of two stories on a basement, with two smaller buildings for offices at each angle, and a verandah in front and rear; there are two wards in the upper, and two in the lower stories for the patients.

To within the distance of a few hundred yards the garrison is surrounded by brushwood, which gradually rises into thick standing wood; the soil is for the most part of a reddish clay mixed with sand, but from the elevated nature of the ground, the rain never lodges in any quantity, and there are no marshes or swamps in the vicinity. About a mile to the east runs a small stream, from the banks of which there generally rises at night a dense fog, producing an unpleasant dampness, but not supposed otherwise hurtful.

At mid-day there are only a few degrees difference in temperature between this and the low grounds, but it is liable to more sudden alternations, and the nights are much more cold and damp. The thermometer in the hot months is generally 74 at six o'clock A. M., 82 at two P. M., and 80 at six P. M.; in the cool months 68, 75, and 73, at corresponding hours. The land wind ceases about nine o'clock in the morning, and as the sea-breeze does not reach the station till eleven or twelve, the interval is frequently hot and oppressive.

The mortality among the garrison, during the last twenty years, has been as under:—

Table XLVIII.  
Showing the annual  
ratio of Mortality  
of troops at Stoney  
Hill.

Years.	Strength.	Deaths.	Ratio of Deaths per 1000 of Mean Strength.
1817	422	41	97
1818	296	11	37
1819	239	72	301
1820	140	7	50
1821	400	18	45
1822	528	25	47
1823	516	13	25
1824	471	14	30
1825	413	187	453
1826	439	8	18
1827	477	137	287
1828	353	18	37
1829	378	5	13
1830	342	6	18
1831	230	40	174
1832	194	14	72
1833	350	11	31
1834	316	11	35
1835	356	12	34
1836	383	8	21
Total	7,243	653	..
Average	362	33	90.2

Thus, notwithstanding the apparent advantages in the position of this station, the mortality has averaged 90 per thousand of the strength annually; and though in some

years it has been as low as in Britain, in 1825 nearly half, and in 1819 and 1827 more than a fourth part of the force was cut off.

The diseases whereby the deaths in each year have been occasioned, are detailed in Abstract No. XVIII. of Appendix, of which the totals for the whole period have been arranged in classes as under:—

	Total Deaths in 20 Years.	Ratio of Deaths Annually per 1000 of Mean Strength.
By Fevers. . . . .	510	70·5
Diseases of Lungs . . . . .	47	6·5
„ Liver . . . . .	14	1·9
„ Stomach and Bowels . . . . .	42	5·8
„ Brain . . . . .	9	1·2
Dropsies . . . . .	14	1·9
All other Diseases . . . . .	17	2·4
Total . . . . .	653	90·2

Table XLIX.  
Showing the principal fatal Diseases  
of troops at Stoney  
Hill.

A comparison of the above with the ratio of mortality by the same classes of diseases throughout the island, will show that though this station suffered severely from the epidemics of 1818, 1825, and 1827, the proportion of deaths from fever has on the whole been about one-half less than the general average. A reference to the Abstract in the Appendix, from which this table has been framed, will show that in some years the station has been almost wholly exempt from it. It is rather remarkable, that epidemics generally break out here at a different period from that at which they make their appearance in the low grounds. In 1819, when the disease was raging at Up-Park Camp, though detachments were constantly arriving from that station between July and October, it never appeared during that period; but in the commencement of the latter month, when it was almost eradicated there, it broke out with great violence among five companies of the 50th and 92d, of whom it cut off nearly one-third. In 1822, also, the troops here were very little affected by the fever which prevailed to such an extent at Up-Park Camp, though large detachments arrived from that station when the disease was at its height. Between 1819 and 1825, this garrison continued to enjoy good health, but in February of the latter year, after a long drought, when the surface of the country was exceedingly parched and arid, and water could scarcely be procured, epidemic fever suddenly made its appearance, and during March and April raged with dreadful violence, continuing its ravages till the end of May, when after the rains had set in for four weeks, it assumed a milder character. From this period to the beginning of July, very few cases occurred; but in that month it again broke out with renewed violence, and continued with little abatement till November, when the corps embarked for the north side of the island.

At the commencement of the epidemic, the troops at Stoney Hill did not exceed 418; in the month of March, 200 of these who had not been attacked by fever, were sent to Fort Augusta, and Up-Park Camp, where for a time they continued healthy. In June, however, in consequence of the disease having broken out at Up-Park Camp, and moderated at this station, those who had been sent there returned; and when it reappeared among them in August, about 100 of the survivors were, as a last resource, encamped on the hill, but without any decided effect. The disease continued to linger at the station till the end of the year, and then seemed only to wear out for want of fresh victims. The total number of troops at the station does not appear to have exceeded 300, except for a few weeks at the commencement of the epidemic, and yet of that small number 184 were cut off, and 11 officers out of little more than 20, in the course of eight months.

The epidemic of 1827 prevailed here principally during the months of October and November, after it had ceased at Fort Augusta; but there seems to have been no peculiarity attending it worthy of notice. In 1831 this station again suffered from fever, though not to so great an extent as on the previous occasions, only about a seventh part of the force having died; it commenced in August, and continued till October, when it assumed a milder form, and gradually disappeared. During this period, the weather was remarkably foggy with frequent heavy rains, and as it began to clear up, the disease moderated. The proportion of deaths to admissions on this occasion was about one in four, and all classes were alike affected.

By contrasting the position, mortality, and fatal diseases of this station and Fort Augusta, we have a striking instance how imperfectly we can appreciate the cause of disease, or predicate, with any degree of certainty, whether one locality is likely to prove more healthy than another. Fort Augusta is situated in the midst of a marsh or lagoon, abounding with that decayed vegetable matter which is supposed a most fertile source of fever, while Stoney Hill is 1360 feet above the level of the sea, and free from any such cause of disease; yet the deaths by fever have not only been higher than at Fort Augusta, in the proportion of 70 to 56, but this station has suffered from four severe epidemics, while Fort Augusta, though in the immediate vicinity of Port Royal, Kingston, and Up-Park Camp, where that disease is so prevalent and so productive of mortality, has been comparatively exempt from all but that of 1827.

In like manner, were we to be guided by the usually received opinions, in regard to diseases of the lungs, we should have been led to suppose, that in a position so elevated,

Stoney Hill.

so liable to frequent alternations of temperature, and with so damp and foggy an atmosphere as Stoney Hill, that class of diseases would create much greater mortality than at Fort Augusta, where the temperature is so equable and the situation less exposed to sudden atmospheric vicissitudes; whereas we find the very reverse to be the case, as diseases of the lungs occasion a mortality of nine and a half per thousand annually of the garrison of Fort Augusta, and but six and a half per thousand of the garrison of Stoney Hill.

Having given these details of the principal stations on the south side of the island, we shall proceed to notice those on the north side, of which the first is Port Antonio.

PORT ANTONIO.

Port Antonio.

THE town of Port Antonio is situated at the north-eastern extremity of the island, 80 miles from Kingston, and lies in a hollow, surrounded by an amphitheatre of thickly-wooded hills. Fort George, in which are the barracks for the troops, is built at the extremity of a peninsula nearly surrounded by the sea, and, though possessing no great elevation, it has from its position a tolerably free exposure to the breeze.

On each side of this peninsula are two harbours for the shipping; that on the east side enjoys a comparatively healthy locality, but that on the west is sheltered by a thickly-wooded hill, which impedes ventilation; and there is a considerable space of level ground generally inundated by the tide, which, at low water, is left in a marshy state, and when acted on by the sun, emits exhalations, said to be both offensive and unhealthy.

The barrack stands about twenty yards from the sea, on a piece of ground of coralline formation, and consists of a building of two stories, elevated on brick pillars. The hospital is built on a higher situation, and raised on arches about seven feet; it contains three wards for the patients, and has a shaded walk attached to it for convalescents. Water is supplied to the troops by contract, from a river a quarter of a mile distant.

There seem to have been no troops at this station in 1825 and 1826, but the mortality during the other years embraced in this Report, has been as under:—

Table L.  
Showing the annual ratio of Mortality of troops at Port Antonio.

Years.	Strength.	Deaths.	Ratio of Deaths per 1000 of Mean Strength.
1817	177	34	192
1818	135	12	89
1819	130	45	346
1820	143	12	84
1821	82	18	219
1822	194	10	52
1823	79	4	51
1824	108	21	194
1827	121*32	3	94
1828	129	19	147
1829	193	31	233
1830	155	21	135
1831	161	20	124
1832	157	29	185
1833	164	37	226
1834	185	32	173
1835	154	18	117
1836	160	4	25
Total	2478	370	..
Average	137	20	149.3

With the exception of last year, the mortality at this station has been uniformly very high, amounting, on the average of the whole period, to 149 per thousand of the strength annually, being considerably above the usual ratio throughout the island.

The diseases whereby the deaths in each year have been occasioned, are detailed in Abstract No. XIX. of Appendix, of which the totals for the whole period have been arranged in classes as follow:—

Table LI.  
Showing the principal fatal Diseases of troops at Port Antonio.

	Total Deaths in 18 Years.	Ratio of Deaths Annually per 1000 of Mean Strength.
By Fevers . . . . .	312	126
Diseases of Lungs . . . . .	13	5.2
" Liver . . . . .	3	1.2
" Stomach and Bowels . . . . .	17	6.9
" Brain . . . . .	7	2.8
Dropsies . . . . .	6	2.4
All other Diseases . . . . .	12	4.8
Total . . . . .	370	149.3

\* 127 men were here for one quarter of a year only, which is equivalent to 32 for a whole year.

Here, as at most of the other stations, the excess of mortality above the usual average is entirely attributable to fever, which seems at all times to be so exceedingly prevalent, that scarcely a year has occurred in which a tenth part of the force has not been cut off by it alone; and it is said to prevail more during long droughts than wet weather. Diseases of the lungs are less numerous than at most of the other stations, but not in any very marked degree; and the other diseases offer no peculiarity worthy of notice.

## FALMOUTH.

Falmouth.  
—

THIS town is situated at the root of a peninsula stretching into a bay which forms the harbour of Falmouth. From its position it is well exposed to the breeze, but on every side except towards the sea is surrounded by a marsh communicating with the ocean, and frequently covered at high water; on the reflux of the tide there is generally accumulated a large quantity of mud, leaves, and other vegetable matter, producing most offensive effluvia during the land wind. Though the soil is sandy with a rocky substratum, yet from the low situation of the town, it is impossible for the water in many places to drain off, so that after heavy rains pools are formed which remain till evaporated. About half a mile from the town on the south a sluggish river empties itself into the sea; its banks are low and muddy, and generally overflowed during heavy rains. The nearest hills are about three miles to the south, from which they stretch towards the sea in a westerly direction, at the distance of eight miles; the intervening country is a complete marsh communicating with the sea, and covered with low trees and brushwood; the air of the station is consequently damp, the soil wet, and decayed vegetable matter abundant. The well water is so bad that the supply for the use of the troops and inhabitants has to be brought from the river.

The barrack and hospital are situated at the extremity of the town on a limestone rock projecting into the sea, where there is generally a cool breeze. The barrack consists of a stone building of two stories, with a gallery and piazza facing the sea to the north; the band and staff serjeants occupy a separate building also of two stories, the whole enclosed by a high wall separating it from the town in the rear, where the officers and married men are quartered in hired lodgings. The hospital is a stone building, raised on arches, and consists of two stories of one ward each, with galleries in front and outhouses in rear.

Notwithstanding the apparently unfavourable nature of the locality the mortality at this station has been under the general average of the island, as will appear from the following Table :—

Years.	Strength.	Deaths.	Ratio of Deaths per 1000 of Mean Strength.
1817	121	9	74
1818	134	9	67
1819	123	16	130
1820	120	23	192
1821	113	6	53
1822	223	26	117
1823	165	4	24
1824	192	10	52
1825	174	32	184
1826	119	27	227
1827	176	41	233
1828	165	10	61
1829	178	9	51
1830	245	21	86
1831	208	53	255
1832	212	16	75
1833	372	26	70
1834	294	28	95
1835	263	22	84
1836	291	11	38
Total	3,888	399	..
Average	194	20	102·6

Table LII.  
Showing the annual  
ratio of Mortality of  
troops at Falmouth.

Thus on the average of the above period the mortality has amounted to about 103 per thousand of the force annually, being 19 per thousand under the mean mortality of the island. The diseases whereby the deaths in each of these years have been occasioned, are detailed in Abstract No. XX. of Appendix, of which the totals for the whole period have been arranged in classes as follow :—

Falmouth.

Table LIII.  
Showing the principal fatal Diseases of troops at Falmouth.

	Total Deaths in 20 Years.	Ratio of Deaths Annually per 1000 of Mean Strength.
By Fevers . . . . .	311	80
Diseases of Lungs . . . . .	34	8.7
"    Liver . . . . .	6	1.6
"    Stomach and Bowels . . . . .	10	2.6
"    Brain . . . . .	19	4.8
Dropsies . . . . .	10	2.6
All other Diseases . . . . .	9	2.3
Total . . . . .	399	102.6

On comparing these results with the average throughout the island, the ratio of deaths by diseases of the stomach and bowels, and also by those of the brain, will be found to present a much greater difference than usual, the former being only one-third, and the latter thrice as high as the general average. It is worthy of remark, too, that notwithstanding the apparent disadvantages of locality, the mortality by fever is by no means so great as at Up-Park Camp, which enjoys an elevated situation with no swamps or low grounds in the vicinity.

MONTEGO BAY.

Montego Bay.

THE town of this name lies about 15 miles west of Falmouth, at the foot of a range of mountains surrounding it on every side except the north-west, where they open to the sea, and form the bay at the extremity of which the town is built. The sea-breeze being much obstructed by these mountains, the heat is more intense than in any other part of the island, and the town and its vicinity have always borne an extremely unhealthy character.

The barrack and hospital are situated at the south-eastern extremity of the town, and are built of stone, but without galleries; they have not been occupied during nine of the years included in this Report, owing to their extreme unhealthiness, but during the other eleven years the mortality of the troops quartered in them has been as under:—

Table LIV.  
Showing the annual ratio of Mortality of troops at Montego Bay.

Years.	Strength.	Deaths.	Ratio of Deaths per 1000 of Mean Strength.
1817	90	8	89
1818	23	2	87
1822	39	2	51
1824	23	5	217
1828	66	14	212
1829	46	5	109
1832	123	44	356
1833	144	25	174
1834	132	16	121
1835	111	6	54
1836	92	32	348
Total	889	159	..
Average	81	14	178.9

This station has uniformly proved very fatal to the troops. Even so far back as 1794 it bore the same character, for the deaths during the four previous years amounted to from 11 to 12 per cent., while other stations were comparatively healthy, and it was then estimated to be the most insalubrious spot on the island. Independent of the deaths which are recorded in the preceding table, a great proportion of the mortality by fever at Maroon Town originated here, as will be explained in the details of that station.

The diseases whereby the deaths in each year have been occasioned, will be found in Abstract No. XXI. of Appendix, of which the totals for the whole period have been arranged in classes as follow:—

	Total Deaths in 11 Years.	Ratio of Deaths Annually per 1000 of Mean Strength.
By Fevers . . . . .	134	150·7
Diseases of Lungs. . . . .	7	7·9
,, Stomach and Bowels . . . . .	5	5·6
,, Brain. . . . .	9	10·2
Dropsies . . . . .	1	1·1
All other Diseases. . . . .	3	3·4
Total . . . . .	159	178·9

Table LV.  
Showing the principal fatal Diseases of troops at Montego Bay.

The great cause of the extraordinary mortality of this station is fever, which may be said to prevail here to a great extent in every year; few even of the resident inhabitants pass a season without suffering from it, and upon several occasions it has been necessary to withdraw the troops in consequence of there being absolutely none left fit for duty. The other diseases present no feature worthy of remark, except that those of the brain are four times as high as at any of the other stations; but where the numbers are so small, and the observations extend over so limited a period, no degree of uniformity can be expected in the results, and therefore we should not have attempted a classification of the diseases at all, were it not to follow out the usual arrangements in that respect.

MAROON TOWN.

THIS post is situated on a high range called the Trelawney Mountains, in the interior of the island, upwards of 2000 feet above the level of the sea, and lies about 20 miles south of Falmouth, and 18 west of Montego Bay. It is surrounded on all sides but one by still loftier mountains, clothed to the summit with stately trees exhibiting every variety of foliage. The view is open to the north-east, and exhibits a vast expanse of sea and land scenery. The whole extent of ground occupied by the garrison is about 200 acres, much interspersed with small hillocks and valleys. These eminences have been chosen for the site of the houses and barracks erected for the accommodation of the troops, which, owing to this circumstance, are considerably detached from each other. The principal building occupied as a barrack is of two stories with three large rooms in each, and an open verandah on the north. The married soldiers live in small huts built by themselves bordering on the parade-ground. The hospital is about half a mile from the barrack on a small eminence, and consists of two buildings of two stories each, connected together on the upper floor by a wooden gallery, the lower floors occupied by the surgeon and hospital serjeant, the upper ones by the patients. The surrounding hills abound with springs of excellent water, and this post is said to possess every advantage which can conduce to health, or render residence in a tropical country desirable.

Maroon Town.

Being surrounded by high mountains the climate is variable, and the temperature liable to sudden transitions. There is much rain, and the evaporation subsequently caused by a tropical sun produces frequent and dense fogs. The thermometer seldom rises higher than 80°, and sometimes at night and towards dawn it is, in winter, as low as 52°. The soil is a deep red clayey loam, extremely tenacious, rendering it almost impracticable to walk out for some hours after a shower, and retaining moisture for a very considerable time, being, in this respect, like the soil in the neighbourhood of Spanish Town, though fortunately the mortality is on a very different scale, as will be seen from the following Table:—



Maroon Town.

Table LVI.  
Showing the annual  
ratio of Mortality  
of troops at Maroon  
Town.

Years.	Strength.	Deaths.	Ratio of Deaths per 1000 of Mean Strength.
1817	99	None.	None.
1818	101	1	10
1819	82	1	12
1820	68	2	29
1821	77	2	26
1822	198	6	30
1823	259	9	35
1824	237	9	38
1825	198	6	30
1826	241	5	21
1827	234	7	30
1828	172	7	41
1829	194	3	15
1830	240	14	58
1831	271	13	48
1832	164	11	67
1833	185	15	81
1834	247	4	16
1835	250	1	4
1836	280	8	29
Total	3,797	124	..
Average	190	6	32.7

By this table it appears that there are some localities where the loss of life does not greatly exceed that of more temperate climates. The mortality on the long average of 20 years has amounted to only a fourth part of what generally prevails throughout the island, and a large proportion even of that has originated from disease not contracted at this station. During several years in which troops were not permanently quartered at Montego Bay, it was customary to send detachments there from Maroon Town during the negro holidays, and these always brought back a large proportion of sick, and many fatal cases. The detachments at Falmouth and Lucea too, when sickly, have occasionally been relieved by healthier ones from this post, and it has sometimes happened that the corps sent to Maroon Town had previously been suffering under a great mortality in other parts of the island, and brought with them many sick in a dying state. After a diligent investigation it appears that from 30 to 40 of the deaths included in the above table may fairly be attributed to one or other of these causes, so that the actual mortality of the station has not exceeded 22 per thousand of the force annually, being the same as among the Foot Guards in London on the average of the last seven years.

Nor has this remarkable salubrity been confined to the period embraced in this Report, but ever since British troops were quartered at Maroon Town it has borne the same high character, as an instance of which we may mention, that from 1st September, 1795, to 30th April, 1797, when about 220 of the 83rd Foot were quartered there, they lost only 12 men, six of whom were brought from Montego Bay in bad health; so that the actual mortality of the station during these two years could not have exceeded  $1\frac{1}{2}$  per cent., being under the usual average among troops in the United Kingdom.

The diseases whereby the deaths in each year have been occasioned, are detailed in Abstract No. XXII. of Appendix, of which the totals for the whole period have been arranged in classes as follow :—

Table LVII.  
Showing the prin-  
cipal fatal Diseases  
of troops at Maroon  
Town.

	Total Deaths in 20 Years.	Ratio of Deaths Annually per 1000 of Mean Strength.
By Fevers . . . . .	58	15.3
Diseases of Lungs . . . . .	24	6.3
" Liver . . . . .	1	.3
" Stomach and Bowels . . . . .	14	3.7
" Brain . . . . .	5	1.3
Dropsies . . . . .	9	2.4
All other Diseases . . . . .	13	3.4
Total . . . . .	124	32.7

The deaths by fevers, however, include those which, as we have already stated, did not

\* Though the mortality among the infantry of the line in the United Kingdom averaged, on a long series of years, only about 15 per thousand annually, as stated in p. 6, that of the Foot Guards has always been considerably higher, and, during the last seven years, was found to have averaged 22 per thousand annually, as above stated.

originate at the station, and if the necessary deduction on that account could be made, the ratio of mortality by that class of diseases would be nearly the same as in Malta. Diseases of the lungs too are considerably under the usual average, though this station is subject to frequent alternations of temperature and those sudden changes from dry to wet weather, which are supposed to be peculiarly unfavourable to them.

LUCEA.

THE town of Lucea lies about 15 miles west of Montego Bay, at the extremity of a spacious bay, and encircled by the mountains of Hanover and Westmoreland, which rise to a great height immediately behind it. The ground in the vicinity presents a hilly and undulating appearance, is in a high state of cultivation, and there are no jungles or marshes in the neighbourhood. The troops are stationed in Fort Charlotte, which is situated on the north-east extremity of a peninsula, bounded on one side by the bay and harbour of Lucea, and on the other by the sea. The barrack and hospitals are built on pillars, which form a piazza, and admit a free circulation of air beneath—an object of great importance in such a climate. The barrack is a new building, erected in 1834.

The climate of Lucea is cool and pleasant in comparison with the other stations along the coast, except during the months of July, August, and September, when the temperature is considerable, the thermometer sometimes rising as high as 85°. There is always a refreshing sea-breeze during the day, and a cold land-wind from the adjacent mountains generally prevails during the night.

There seem to have been no troops stationed here in 1831, but the mortality during the other years embraced in this Report has been as under:—

Lucea.

Table LVIII.  
Showing the annual  
ratio of Mortality  
of troops at Lucea.

Years.	Strength.	Deaths.	Ratio of Deaths per 1000 of Mean Strength.
1817	70	5	71
1818	63	6	95
1819	63	5	79
1820	67	3	45
1821	73	3	41
1822	92	7	76
1823	92	8	87
1824	109	7	64
1825	90	16	178
1826	47	2	43
1827	99	3	30
1828	84	1	12
1829	86	3	35
1830	80	28	350
1832	96	16	167
1833	85	3	35
1834	76	2	26
1835	119	3	25
1836	75	12	160
Total . .	1566	133	..
Average .	83	7	84·9

Thus it appears that this station has enjoyed a considerable exemption from that mortality which has fallen so heavily on many of the others, the average deaths being 84 per thousand of the strength annually, or 37 per thousand under the mean of the whole island. It has a high reputation for salubrity among the inhabitants, and is on that account often resorted to by convalescents.

The diseases whereby the deaths in each year have been occasioned are detailed in Abstract No. XXIII. of Appendix, of which the totals for the whole period have been arranged in classes as follow:—

Table LIX.  
Showing the prin-  
cipal fatal Diseases  
of troops at Lucea.

	Total Deaths in 19 Years.	Ratio of Deaths, Annually, per 1000 of Mean Strength.
By Fevers . . . . .	99	63·2
Diseases of Lungs . . . . .	16	10·2
"    Liver . . . . .	1	·6
"    Stomach and Bowels . . . . .	7	4·5
"    Brain . . . . .	3	1·9
Dropsies . . . . .	3	1·9
All other Diseases . . . . .	4	2·6
Total . . . . .	133	84·9

Lucea.

The distinguishing feature in the diseases of this station is, that the mortality by fever is little more than half the average throughout the island. The troops, in a great measure, escaped the epidemics of 1819, 1822, and 1827; but what is rather remarkable, they have suffered severely from fever in years when most parts of the island were exempt from it. In 1830, for instance, a comparatively healthy year elsewhere, a third part of the troops were cut off by fever alone; and last year, which was very healthy throughout the island, a ninth part of the force died from the same cause.

Diseases of the lungs occasion more mortality than at any of the other stations. The other classes offer no marked peculiarity.

Having illustrated thus particularly the mortality and fatal diseases at the permanent military stations of this island, we shall next give a brief detail of the deaths among the detachments at several small out-posts which have occasionally been occupied by our troops during a portion of the period embraced in this Report. The first of these is

SAVANNAH LA MAR,

Savannah la Mar.

a town built on the sea-beach at the south side of the island, and near its western extremity. The adjacent country, to the distance of 12 miles, is a low, alluvial flat, richly-cultivated, and bounded by a range of lofty mountains. Though level, the ground is not swampy, but the soil being of stiff clay mixed with gravel, and slightly covered with vegetable mould, does not readily absorb moisture. The temperature is moderate and equable, and there appears nothing in the position to render it so exceedingly fatal as it has proved to its garrison, among whom the deaths from 1817 to 1822 were as follow:—

Years.	Strength.	Deaths.	Ratio of Deaths per 1000 of Strength.
1817	70	8	114
1818	58	6	103
1819	56	13	232
1820	45	7	155
1821	51	7	137
1822	31	21	677
Total.	311	62	Average 200

being a fifth part of the force annually. After the loss of two-thirds of the detachment in 1822, no troops were sent to this station till 1824, when a detachment of 117 arrived; they remained only three months, during which they lost 5. In the following year 54 arrived, of whom 6 died within as short a period. The station was then left unoccupied till 1832, when, in consequence of the insurrection, 24 men were sent there, of whom 3 died in two months, besides several after their return to Maroon Town. On each of these occasions almost every individual in the detachment suffered from an attack of fever before he left the station.

All the deaths were caused by fever, except one by consumption, three by diseases of the bowels, and four by diseases of the brain. The numbers are too few, and the period too limited, however, to attempt drawing from such data any specific deductions as to the relative prevalence of these diseases.

PORT MARIA.

Port Maria.

THIS post is situated on the north side of the island, about 30 miles to the west of Port Antonio. Owing to its extreme insalubrity, it has not been occupied since 1817, in which year, out of a detachment of 58 men, 24 were cut off in nine months. It has always borne the same unhealthy character; indeed, long experience has proved that a great part of the northern sea-coast of this island, particularly from this post to Manchioneal, is at all seasons extremely insalubrious, and can never be garrisoned by European troops without a great sacrifice of life.

Owing to an insurrection of the negroes in the north and east of the island in the beginning of 1832, a very considerable addition was made to the white troops stationed there, and unfortunately it became necessary, for the protection of the inhabitants, to send out a number of small detachments, which were not all withdrawn till last year. The following details of the sickness and mortality which prevailed among them, though by no means complete, will serve to illustrate the extreme insalubrity of many of the positions selected on this occasion, and may prevent their ever being re-occupied on a similar emergency.

MANCHIONEAL.

Manchioneal.

THIS post is situated on the sea-coast, at the eastern extremity of the island, about 20 miles from Port Antonio, but we are otherwise unacquainted with its topography. As we have stated above, it lies in a district notoriously unhealthy, an instance of which may be found in the fate of a detachment of 22 men sent there from Port Antonio in 1832, of whom 9 died shortly after their arrival; every individual was attacked by fever, and at the period of their removal not a man of the detachment was fit for duty.

## BUFF'S BAY.

THIS post lies on the north side of the island, about 20 miles to the west of Port Antonio. A detachment of 25 men were sent here from that station in 1832, during the Christmas holidays. In the course of a month seven of them died, and the rest were withdrawn before the end of January, owing to the sickly state to which they were reduced.

*Buff's Bay.*

## ST. ANN'S BAY.

THIS post lies in a very low situation on the north side of the island, about 60 miles to the west of Port Antonio, in a great measure excluded from the sea-breeze, and exposed to the influence of an extensive morass, about two miles to windward, which has always given it a very unhealthy character. A detachment of 70 men was sent here during a few months of 1833, but in that short period 11 were cut off by fever, and the rest were reduced to so sickly a state, that it became necessary to remove them to

*St. Ann's Bay.*

## SANS SOUCI,

about a mile from St. Ann's Bay, and situated on a hill 400 feet above the level of the sea, having a fine free exposure. Here the detachment, now reduced to 60 men, enjoyed a tolerable degree of health, as will appear from the following return of the deaths during the last three years:—

*Sans Souci.*

Years.	Strength.	Died.
1834	70	4
1835	61	3
1836	54	5
Total.	185	12

or 65 per 1000, being under the average mortality of the island during that period.

## BATH.

THIS post is situated near the south-east extremity of the island, about seven miles from the sea, and 48 from Kingston, in a very low and damp country, surrounded by hills, and watered by numerous streams, which inundate the ground after heavy rains, and, till evaporated, leave it in a very marshy state. A detachment of 60 men was sent here about Christmas 1833, and in the returns of the following year we find 17 deaths; and in 1835, 20 deaths out of a force of 80, being upwards of a fourth part of the original strength annually. With the view of improving the health of the detachment, it was removed to

*Bath.*

## GREENCASTLE,

seven miles distant, situated on the summit of a height, about 1000 feet above the level of the sea, and surrounded by a succession of hills, in a fine, open, pastoral country, free of bush or underwood. Till the month of July 1836, the expectation of this proving a healthy residence appeared to be realised, but a most fatal fever then broke out, which in one month cut off 20 out of 84; three-fourths of the detachment were attacked by it, and the survivors were left in so debilitated a state, that they had all to be withdrawn.

*Greencastle.*

## CHAPELTON.

THIS post is situated nearly in the centre of the island, on the extremity of a ridge, which projects into an irregular but extensive valley, surrounded by hills from 1500 to 2000 feet in height; the soil is a clayey loam or limestone, and all well cultivated; the temperature low, and atmosphere generally humid and foggy. A detachment of 91 men was sent there in July 1833, and quartered in a spacious court-house 300 or 400 feet above the valley. Remittent fever appeared among them about a fortnight after their arrival; of the whole number only one escaped being attacked by it, and before the month of December, when they were withdrawn, 11 had died at the station, and 3 immediately after their removal, making in all 14 in six months; the rest were so debilitated by their sufferings that scarcely a man was able to march from his quarters.

*Chapelton.*

## BIDDEFORD.

THIS post is also in the interior of the island, in the parish of Trelawney, and 18 miles from Falmouth. A detachment of 63 men was sent to it in July 1833; but remittent fever broke out in the middle of August, and before the end of October 16 had died, and almost every one had been attacked by it: the survivors were immediately withdrawn in a very sickly and debilitated state, and several sunk under the disease within a short time after their removal.

*Biddeford.*

Lacovia.

LACOVIA.

THIS post lies in an open expanse of country, on the south side of the island, near the banks of the Black River, about 12 miles distant from the sea, and 84 from Kingston. A detachment of 76 men was sent here from Fort Augusta in 1834. Fever soon made its appearance among them, and raged with such violence that 6 died before they could be removed, 4 within a few hours after they embarked for Fort Augusta, and 15 within a day or two after their arrival, making in all 25: scarcely an individual escaped the disease, and the whole detachment remained for a long time in a very debilitated and sickly state.

UNITY ESTATE.

Unity Estate.

THIS lies in the parish of St. Mary's, on the north side of the island, in the neighbourhood of Port Maria, before described as a very unhealthy tract of country. A detachment of 70 men was sent here in July or August 1834; but in the course of one month after their arrival, 12 died, and the remainder were immediately withdrawn: several died after their removal, whose deaths we are unable to trace.

Taking the average of all these posts, it may safely be computed that the whole troops employed in garrisoning them would at this rate have been cut off in less than two years; and all this mortality occurred at a period when the island enjoyed a more than usual degree of salubrity: what then must it have been in an unhealthy year? It is fortunate that the necessity for retaining such posts no longer exists; and that, should it ever again be requisite to detach troops throughout the island, the dear-bought experience of these years can now be made available for procuring more healthy localities. That such are to be found in this island, we have already shown, by the instance of Maroon Town, and we have now several additional proofs in the low rate of mortality experienced at the following stations.

PHENIX PARK.

Phoenix Park.

Situated on a mountain about 2000 feet above the level of the sea, and enjoying a cool temperature, with a climate much the same as Maroon Town. A detachment was quartered here for three years and a half, of which the returns furnish the following details:—

Years.	Strength.	Deaths.
1833	40	..
1834	72	5
1835	66	1
1836	69	1
Total	247	7

being at the rate of only 29 per thousand annually, or less than a tenth part of the mortality experienced by some of the other detachments.

MONTPELIER.

Montpelier.

Situated on the summit of a hill in the interior, but of what elevation we are not aware. As its name imports, it enjoys a high character for salubrity, which has been well supported by the healthy state of a detachment quartered there for four years, among whom the mortality was as follows:—

Years.	Strength.	Deaths.
1833	60	1
1834	61	2
1835	80	4
1836	67	1
Total	268	8

or 30 per thousand annually.

MANDEVILLE.

Mandeville.

Of the situation of this post we can furnish no details; but, from the low rate of mortality, it is supposed to be in some of those high mountain ranges which experience has proved so salubrious; a detachment was stationed here for three years, in which the mortality was as follows:—

Years.	Strength.	Deaths.
1833	78	1
1834	75	1
1835	74	6
Total	227	8

being 35 per thousand annually.

Here then we have an instance of three detachments, which, in these healthy stations, have altogether suffered less from mortality in the space of four years, than some of the detachments at the others in the course of as many months, and indeed enjoyed as great a degree of health as it seems possible for European troops to do within the tropics. We have another, though not quite so striking an instance of this in the post of

CALEDONIA.

Situated at the western extremity of the island, on the side of a rocky hill, surrounded by others, which tower to the height of nearly 6000 feet, and are covered with small trees and brushwood. Here the thermometer at night frequently falls as low as 60°, but ranges from 80° to 88°, during the hottest period of the day. The rains are almost incessant from March to October, and the atmosphere humid, and subject to thick fogs.

The detachment at this post enjoyed very good health during two years; the third was rather unhealthy, owing to the prevalence of fever of the common continued type, which proved fatal to about a seventh part of the number. Even including these, however, the mortality did not nearly amount to the usual average of the island, as will be seen from the following details:—

Years.	Strength.	Deaths.
1834	80	4
1835	85	1
1836	77	11
Total	242	16

being at the rate of 66 per thousand of strength annually.  
It is to be regretted that we do not possess a more minute description of the localities which have operated so favourably to our troops, as well as of those which have had the reverse effect in so very remarkable a degree, seeing that it might have proved of such material service in regulating the selection of detached posts in future. We can therefore merely solicit the attention of the authorities to the numerical details we have exhibited, as a sufficient proof that, with well-chosen positions for our troops, service in this climate need not necessarily induce that expenditure of life, and deterioration of constitution, which has hitherto attended it.

GENERAL SUMMARY.

BEFORE framing a summary of our conclusions in regard to the salubrity of each station, it may be necessary to test their accuracy, by ascertaining whether the aggregate strength and deaths at all of them, collectively, correspond with these data, as stated in the general tables at the commencement of this Report.

In Table 35 the aggregate strength of the white troops serving throughout the island was stated at . . . . . 51,567, the deaths at 6,254  
In Table 37 the aggregate strength of the black troops and pioneers serving there was stated at . . . . . 5,729, the deaths at 172  
Total . . . . . 57,296 6,426

In the preceding division of the mortality, according to the stations where it occurred, we stated the aggregate strength and deaths at each, to have been as under:—

Stations.	Aggregate Strength.	Total Deaths.	Stations.	Aggregate Strength.	Total Deaths.
Up-Park Camp . . . .	14,520	2,042	Green Castle . . . .	84	20
Port Royal . . . . .	5,068	573	Chapelton . . . . .	91	14
Fort Augusta . . . . .	7,786	572	Biddeford . . . . .	63	16
Spanish Town . . . . .	6,719	1,091	Lacovia . . . . .	76	25
Stoney Hill . . . . .	7,243	653	Unity Estate . . . . .	70	12
Port Antonio . . . . .	2,478	370	Phoenix Park . . . . .	247	7
Falmouth . . . . .	3,888	399	Montpelier . . . . .	268	8
Montego Bay . . . . .	889	159	Mandeville . . . . .	227	8
Maroon Town . . . . .	3,797	124	Caledonia . . . . .	242	16
Lucea . . . . .	1,566	133	At Kingston in 1825, not included with Fort Augusta . . . . .	150	56
Savannah-la-Mar . . . .	506	76			
Port Maria . . . . .	58	24			
Manchioneal . . . . .	22	9			
Buff's Bay . . . . .	25	7			
St. Ann's Bay . . . . .	70	11	Total . . . . .	56,478	6,474
Sans Souci . . . . .	185	12	Total as above . . . .	57,296	6,426
Bath . . . . .	140	37	Difference . . . . .	818	48

General Summary.

So that over the whole period of twenty years, there is only a difference of 48 in the deaths, and 818 in the aggregate strength, which is certainly as near an approximation as could possibly be expected in a force so much distributed. This difference is by no means likely to affect the accuracy of the results, as it would not average more than 40 in the strength and about two in the deaths annually.

Having thus ascertained the accuracy of the preceding deductions, we submit the following Table, to exhibit a comparative view of the mortality by each class of diseases at the principal stations throughout the island.

Table LX.  
Comparative View  
of the Mortality by  
the principal classes  
of Diseases among  
the troops at each of  
the subordinate  
stations in Jamaica.

	Annual ratio of Mortality per 1000 of the White and Black Troops, serving at each of the following subordinate Stations.										Ratio of Mortality per 1000 of White Troops serving throughout the Island.
	Up-Park Camp.	Port Royal.	Fort Augusta.	Spanish Town.	Stoney Hill.	Port Antonio.	Falmouth.	Montego Bay.	Maroon Town.	Lucea.	
By Fevers . . . . .	121·	93·9	55·5	141·1	70·5	126·	80·	150·7	15·3	63·2	101·9
Diseases of Lungs . .	8·5	7·3	9·7	9·1	6·5	5·2	8·7	7·9	6·3	10·2	7·5
„ Liver . . . . .	·8	1·6	·3	·3	1·9	1·2	1·6	..	·3	·6	1·
„ { Stomach } { & Bowels }	5·8	5·9	3·3	4·8	5·8	6·9	2·6	5·6	3·7	4·5	5·1
„ Brain . . . . .	2·	2·4	1·3	3·7	1·2	2·8	4·8	10·2	1·3	1·9	2·6
Dropsies . . . . .	·8	·6	·7	1·6	1·9	2·4	2·6	1·1	2·4	1·9	1·2
All other Diseases . .	1·7	1·4	2·7	1·8	2·4	4·8	2·3	3·4	3·4	2·6	2·
Total . . . . .	140·6	113·1	73·5	162·4	90·2	149·3	102·6	178·9	32·7	84·9	121·3

Though our materials will not admit of a separation of the deaths and diseases of the black troops or pioneers at each station from those of the whites, yet on the supposition that the former are equally distributed throughout the island, and that the deaths among them amount to 3 per cent. annually at each station, we can approximate to the ratio of mortality among the white troops alone, by the following calculation:—Take the station of Up-Park Camp for instance.

White and black troops . . . . .	Strength. 1000	Annual Mortality. 140·6
Deduct for black troops and pioneers . . . . .	100	3·
Leaves strength and deaths of white troops only . . . . .	900	137·6

Which will increase the ratio of mortality among the white troops alone to 152  $\frac{3}{10}$  per thousand annually, and so on with all the other stations where such a correction is deemed necessary.

The preceding Table will exhibit at a glance the diseases most inimical to the troops at each station; the following condensation of our previous results will, in like manner, serve to illustrate the variable character of the climate, and the relative influence of mortality in each year, at the principal stations throughout the Island.

Table LXI.  
Comparative view  
of the ratio of Mor-  
tality among the  
troops in each Year  
at these subordinate  
stations.

Years.	Out of every 1000 Troops at the undermentioned Stations, the following proportions have died in each year from 1817 to 1836 inclusive.										Average of whole Command.
	Up-Park Camp.	Port Royal.	Fort Au- gusta.	Spanish Town.	Stoney Hill.	Port Antonio.	Falmouth.	Montego Bay.	Maroon Town.	Lucea.	
1817	83	39	34	128	97	192	74	89	None.	71	88
1818	65	50	33	278	37	89	67	87	10	95	89
1819	501	316	103	68	301	346	130	..	12	79	294
1820	160	58	92	273	50	84	192	..	29	45	153
1821	130	225	44	91	45	219	53	..	26	41	116
1822	443	205	51	242	47	52	117	51	30	76	171
1823	82	83	31	200	25	51	24	..	35	87	65
1824	45	100	81	207	30	194	52	217	38	64	84
1825	341	321	58	399	453	..	184	..	30	178	307
1826	72	94	61	186	18	..	227	..	21	43	80
1827	225	155	280	164	287	94	233	..	30	30	224
1828	118	18	84	82	37	147	61	212	41	12	74
1829	43	82	70	51	13	233	51	109	15	35	62
1830	120	148	42	124	18	135	86	..	58	350	97
1831	110	34	79	236	174	124	255	..	48	..	133
1832	91	32	24	57	72	185	75	358	67	167	111
1833	78	39	56	67	31	226	70	174	81	35	86
1834	70	107	51	155	35	173	95	121	16	26	93
1835	52	36	70	194	34	117	84	54	4	25	75
1836	51	9	60	144	21	25	38	348	29	160	61
General Average.	140·6	113·1	73·5	162·4	90·2	149·3	102·6	178·9	32·7	84·9	121·3

Lest we should exceed the limits to which this Report must necessarily be circumscribed, we shall refrain from entering on the many interesting deductions to be drawn from these results; it is sufficient that we have established the most important facts connected with the mortality and diseases of this island, and thereby afforded the materials for further investigation to those who may be inclined to enter on the subject.

The influence of the seasons on the health of the troops in this island is the only subject to which we have now to refer. This will best be established by the totals of the admissions and deaths in each month during the whole period included in this Report, with the exception of 1828 and 1829, which, from being stated in quarterly instead of monthly periods, could not be included.

Table LXII.  
Showing the influence of the seasons in producing Sickness and Mortality among the troops in Jamaica.

	Total Admissions.				Total Deaths.			
	By Acute Diseases.	By Chronic Diseases.	By Surgical Diseases.	By all Diseases.	By Acute Diseases.	By Chronic Diseases.	By Surgical Diseases.	By all Diseases.
In 18 Januarys .	5,321	632	1,512	7,465	496	54	9	559
18 Februarys .	4,600	589	1,536	6,725	285	60	6	351
18 Marches .	4,277	636	1,647	6,560	249	34	8	291
18 Aprils .	4,240	553	1,767	6,560	207	53	2	262
18 Mays .	4,419	614	2,006	7,039	238	42	6	286
18 Junes .	4,909	604	1,790	7,303	276	43	4	323
18 Julys .	5,413	580	1,674	7,667	360	61	6	427
18 Augusts .	5,696	465	1,608	7,769	733	48	5	786
18 Septembers	5,419	465	1,470	7,354	471	41	3	515
18 Octobers .	5,309	456	1,365	7,730	581	57	2	640
18 Novembers	5,837	508	1,364	7,709	750	48	3	801
18 Decembers	5,661	441	1,158	7,260	674	49	2	725
Total .	61,101	6,543	18,897	86,541	5,320	590	56	5,966

Thus, it appears that the most sickly as well as most fatal period of the year extends from August to December, and that the only months comparatively healthy are March, April, and May, which possess the same character throughout the West Indies, and, we might add, most parts of the northern hemisphere, at least so far as the health of troops is concerned.

Having completed this investigation in regard to the troops in Jamaica, those serving at the Bahamas and Honduras will next engage our attention.



## III.—BAHAMAS.

Lat. 21° 23' to 27° 50' N. ; Long. 71° 5' to 79° 5' W.

III.  
Bahamas  
Command.

## General Description.

THE Bahamas consist of several hundred islands, of various magnitudes, extending, in the form of a crescent, nearly 600 miles. They are mostly of coralline formation, low, flat, and but scantily covered with soil, and the greater number of them uninhabited. The most important of the group, from its harbour and situation with respect to the Florida Channel, is New Providence; and, as the troops are principally quartered in that island, it is, perhaps, unnecessary to describe the topographical peculiarities of the others.

The island of New Providence lies in lat. 25° 29' N.—long. 76° 34' W.; and extends about 21 miles in length from east to west, and 7 in breadth from north to south. It is nearly covered with large trees and brushwood, and much intersected with marshes and lagoons. A range of slightly elevated hills runs along part of the island at a very short distance from the sea; and upon the face of this ridge stands the town of Nassau, the capital of the island and seat of government. Another range runs nearly parallel to the former, at the distance of about two miles and a half: the whole of the intervening space forms an extensive marsh.

## Climate and Temperature.

The climate of the Bahamas varies very considerably both in temperature and salubrity, according to the geographical position and local peculiarities of each island. At New Providence the weather, during the cold season, which extends from November to May, is extremely pleasant; the thermometer in the shade being generally from 60° to 70°, the mid-day heat tempered by a constant breeze, and the evenings cool and agreeable.

From May to November the heat increases or decreases as the sun advances or retires from the tropic of Cancer, and during this period the range of the thermometer is from 75° to 85°, seldom rising above 90°. This increase of temperature is generally accompanied by southerly winds or calms, which are described as being very oppressive.

The following Table shows the monthly range of the thermometer at Nassau, on an average of five years from 1830 to 1834 inclusive:—

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Average.
Maximum .	77½	76	80½	83	86½	89	92	90	89	83½	79	76½	83½
Medium .	71	73	75	79	81½	84½	86	86½	85	79	73	70	78½
Minimum .	66	69½	69	75½	77	80	83	83	81	73½	67	63½	74

A considerable quantity of rain falls throughout the year, but we possess no exact measurement of it. The spring rains commence about May, and continue for a few weeks. Those of autumn commence in September, and generally terminate in November or December. During the autumnal months fogs are very frequent in the mornings and evenings; but, from December to May, the weather is generally fine, clear, and dry.

A considerable portion of the Bahama chain enjoys the benefit of the north-easterly trade-winds, but New Providence, lying beyond the tropics, is much subject to southerly winds, which are deemed very unhealthy.

## Troops employed.

Since 1818, when it was found necessary to withdraw most of the European troops from this station, the force has principally consisted of a wing of one of the West India corps and a few artillery-men: the former sends a detachment of 50 men to Turk's Island, and occasionally a few to any of the others where their presence may be required.

## Barracks.

The principal barrack was, till lately, at Fort Charlotte, a spot notorious for its insalubrity. It is situated on the summit of the little ridge of ground in rear of the town of Nassau, and surrounded, in every direction, except towards the sea, by extensive marshes, the exhalations from which, during the morning and evening, generally envelope the barrack in a dense fog.

The new barrack at Fort Nassau is composed of a single building of three stories, with a spacious open piazza all round, and well calculated for the comfort and accommodation of the troops. It is situated within a few yards of the sea, on a dry, calcareous soil, and sheltered by the rising ground on which Fort Charlotte stands, from the large tract of swampy ground to the westward.

The artillery barrack, in which are generally quartered from 12 to 15 soldiers, with an officer, is situated lower down the hill than Fort Charlotte; and, though it has been less unhealthy, the mortality has always been very considerable among the few white troops quartered in it.

## Rations and Diet.

The weekly ration of the white troops in this Command, during the period comprehended in this Report, has generally consisted of 7 lbs. of bread, 5 lbs. of salt meat, 2 lbs. of fresh meat, and a quart of rum. That of the black troops has been varied, according to the state of their health; it having been found that they suffered even more from a salt meat diet than the whites. The following is the weekly ration established for them in 1828, and which is understood to have continued, with little alteration, since that period:—7 lbs. of bread, 1½ lb. fresh beef, 1½ lb. salt meat, 1½ lb. salt pork, 10 oz. of rice, 2½ pints of peas, 9 oz. of sugar, 5 oz. of cocoa, and 3½ gills of rum, but the relative quantity of fresh and salt meat issued has varied according to circumstances.

The duty and employment of both these classes of troops is much the same as at the other

West India stations, and is not likely in any way to have affected their health. The extent of sickness and mortality among them during the last twenty years is shown in the following Table:—

WHITE TROOPS.					BLACK TROOPS.				
Years.	Mean Strength.	Admissions into Hospital.	Deaths per War-office and Medical Returns.		Mean Strength.	Admissions into Hospital.	Deaths per War-office and Medical Returns.	Ratio of Admissions per 1000 of mean Strength.	Ratio of Deaths per 1000 of mean Strength.
1817	13	8	2	The Numbers are too few to admit of any deductions being drawn from the Annual Ratios of Admissions and Deaths.	486	535	16	1,204	33
1818	15	14	2		215	223	5	1,037	23
1819	82	202	42		160	148	4	925	25
1820	38	97	5		119	83	3	697	25
1821	42	62	3		113	89	2	787	18
1822	50	73	4		115	81	3	704	26
1823	37	33	13		110	65	3	591	27
1824	29	20	7		108	63	2	583	19
1825	22	7	3		212	271	15	1,278	71
1826	14	30	5		356	296	22	831	62
1827	19	32	2		404	490	16	1,213	40
1828	18	37	8		480	588	24	1,225	50
1829	19	11	2		571	729	29	1,277	51
1830	19	22	2		578	697	15	1,206	26
1831	18	26	2		478	503	18	1,052	38
1832	20	25	3		549	500	16	911	29
1833	20	19	..		520	503	15	967	29
1834	18	14	..		508	583	22	1,148	43
1835	18	7	1		524	559	34	1,067	65
1836	24	26	1		496	542	26	1,093	52
Total .	535	765	107		7,102	7,598	290	..	..
Average	27	38	5½		355	389	14½	1,070	41

Table LXIII.  
Showing the Admissions into Hospital and Deaths among Troops in the Bahamas.

Thus, among the white troops there have been 765 admissions into hospital, and 107 deaths, during the last 20 years, out of an aggregate strength of 535; making the average annual ratio of admissions 1430 per thousand, and of the deaths 200 per thousand, or a fifth part of the whole force annually.

These results would lead to the inference that the climate of New Providence is exceedingly inimical to the constitution of white troops. In 1819, more than one-half, and, on several other occasions, more than a third part of them were cut off. There is good reason, however, to believe that this mortality has been more attributable to the unhealthy locality of the barracks than to the general insalubrity of the climate, as the following extract from the parish register of the deaths among the white population of Nassau, for a series of years, shows that they have not suffered by any means in the same proportion:—

	1811	1812	1813	1814	1815	1816	1817	1818	1819	1820	1821	1822	Total.	Average.
Deaths of all ages	65	92	111	110	79	76	98	58	95	69	40	51	944	79

The average numbers of the white population of the town, during this period, is stated to have been about 1200 of all ages; consequently, the mortality among them has been about 66 per thousand annually, or thrice the rate which prevails in Great Britain; while the mortality among the troops has been thirteen times as high as among those employed at home.

The unhealthy site of Fort Charlotte barrack has been frequently the subject of remark by the medical authorities. Shortly after it was erected, in the end of the last century, nearly the whole of the 47th regiment, including men, women, and children, were swept off by yellow fever within a few weeks. In 1802 the 7th Fusiliers buried 220, out of 300, within as short a period; and such was the virulence of the disease, that, out of 12 officers attacked, one only recovered. In the following year it again broke out, and reduced the remainder of this force to 50 men, whose lives were, for a time, saved by removal to a neighbouring island, where only one died in the course of three months; but, immediately on their return, the commanding officer and almost every man of this ill-fated body fell victims to the insalubrity of the fort. For some years afterwards no European troops seem to have inhabited it; but 70 men of the 58th regiment were sent there in 1818, who lost about 40 in six months, besides 13 out of 37 women and children: not a man of the whole force was left fit for duty; and the lives of the survivors were only saved by their removal to a small island about a mile and a half distant.

The lower rooms of this barrack proved much more fatal to the inmates than the upper, and the hospital appears to have been still more unhealthy in its site; so much so, that the white soldiers, in sickly seasons, looked upon admission into it to be equivalent to a death-warrant.

Though the health of black troops is, in general, but little affected by those febrile diseases which prove so inimical to the white, even that class, when occupying the same barrack,

suffered severely, particularly the men in the lower rooms. In 1828, out of 80 in these rooms, 17 died, or nearly a fifth of the whole, while, out of 210 in the upper rooms, but 8 died; and in the new barracks at Fort Nassau, only 3 died out of 180. This barrack, however, continued to be occupied by these troops till 1834, when, in consequence of its dilapidated state, they were withdrawn to some temporary huts in the town of Nassau, which do not seem to have afforded much healthier accommodation. The barrack at Fort Nassau has always been healthy, the accommodation good, and the sickness and mortality among the troops there exceedingly low. The climate of the Bahamas is, in general, very favourable to the negro race: indeed, so far as can be ascertained from the Parliamentary Returns, the ratio of mortality among the slave population is only half as high as in the other West India islands; yet, that of the negro troops is above the average there, being 41 per thousand annually.

These remarks in regard to the barracks have been deemed necessary, in order that incorrect inferences may not be drawn as to the climate of the Bahamas, by attributing to it a degree of mortality which seems to have been in a great measure owing to the troops having continued, for a long series of years, to occupy a position which, from its extreme insalubrity, was not unaptly termed the abode of death.

In Abstract No. XXV. of Appendix, will be found a specific statement of every disease whereby either an admission into hospital or a death has been occasioned, during the last 20 years, as reported by the medical officers; from which the following Table has been compiled to exhibit the results in a more comprehensive form:—

Table LXIV.  
Showing the principal Diseases among Troops in the Bahamas.

	WHITE TROOPS.			BLACK TROOPS.			
	Total Admissions in 20 Years.	Total Deaths in 20 Years.		Admissions.		Deaths.	
				Total among whole Force in 20 Years.	Annual Ratio per 1000 of Mean Strength.	Total among whole Force in 20 Years.	Annual Ratio per 1000 of Mean Strength.
By Fevers . . . . .	506	85	The Numbers are too few to admit of any deductions being drawn from the Annual Ratios of Admissions and Deaths.	2,260	318	40	5.6
Eruptive Fevers . . . . .	..	..		65	9	12	1.7
Diseases of Lungs . . . . .	15	3		622	88	69	9.7
of Liver . . . . .	5	1		6	1	1	.1
of Stomach and Bowels . . . . .	82	7		821	115	46	6.5
of Brain . . . . .	9	3		33	5	13	1.9
Dropsies . . . . .	7	3		73	10	18	2.6
Rheumatic Affections . . . . .	7	..		410	58	12	5.6
Venereal ditto . . . . .	23	..		393	55	..	
Abscesses and Ulcers . . . . .	31	..		1,109	156	10	
Wounds and Injuries . . . . .	33	..		570	80	6	
Punished . . . . .	26	..		480	67	..	
Diseases of the Eyes . . . . .	4	..		154	23	..	7.3
of the Skin . . . . .	4	..		253	36	..	
All other Diseases . . . . .	13	..		349	49	11	
Causes not known, the Deaths being omitted in Medical Reports . . . . .	..	5		..	..	52	
Total . . . . .	765	107		7,598	1,070	290	41.

Owing to the limited number of the white troops, there would be little utility in attempting to draw the usual deductions in regard to the influence of each class of diseases in producing sickness and mortality among them in this climate; we therefore shall only state generally that four-fifths of the deaths have been from fevers, almost entirely of the remittent type, which have been so severe that more than 1 in 5 died of all attacked. Diseases of the stomach and bowels, too, seem to be nearly as fatal as in the Windward and Leeward Command, but those of the lungs much less so.

The admissions and deaths of the black troops afford much more extensive results; and from these it appears that fever has been extremely prevalent among them also, though they are, in general, exempt from its influence. The proportion of admissions under that head is at least double what occurs from the same cause either in the Windward and Leeward Command or Jamaica, and almost all the cases have been of the remittent type. There is, however, this marked difference between the influence of that disease among the whites and blacks, that, of the former, 1 in 5 died of all attacked, while, of the latter, there died only 1 in 50.

The admissions and deaths, under the head of eruptive fevers, among the black troops, all occurred from small-pox. This disease was introduced into the Bahamas, in the beginning of April 1829, by a vessel from the coast of Cuba, where it was at that time raging. Precautionary measures not being adopted early enough, it spread very generally over the island; but it was not till the month of July that it made its appearance among the black troops. Of these, 65 were attacked, and 12 died; none of the white troops were affected; and the disease ceased altogether about the beginning of November.

This class of troops, as well as the whites, appears to have been much less subject to diseases of the lungs than in the Windward and Leeward Command, or even in Jamaica; but diseases of the stomach and bowels are more prevalent, and nearly as productive of mortality,

as in the former of these Commands. There is little to remark regarding any of the other diseases, except that those of the liver have been exceedingly rare ; and there seems to be not quite so great an exemption from venereal affections as at the other West India stations.

It is rather difficult to draw very accurate deductions in regard to the ratio of mortality by each class of diseases, owing to more than a sixth part of the deaths being unaccounted for in the medical returns, though stated in those forwarded to the War Office. A part of this difference may possibly arise from the deaths among a detachment of about 50 men at Turk's Island not being included in the former. This island is one of the most southern of the Bahama range, lying between 400 and 500 miles to the south-east of New Providence. It consists entirely of layers of concrete sea-sand and shells, with scarcely a vestige of vegetation on the surface. It is full of extensive salt-ponds ; the water is brackish, and neither fruit nor vegetables are to be obtained. The few inhabitants live chiefly on salt provisions and dry grain, with an indifferent supply of fish. Scorbutic and bowel complaints are very frequent among them, and almost every individual is said to suffer from piles, accompanied with discharges of blood. There are no medical returns, however, to afford any specific information on this head.

The following Table of the Total Admissions and Deaths among the Troops in the Bahamas, in each month, from 1825 to 1836 inclusive, is submitted for the purpose of showing the influence of the seasons in producing sickness and mortality. The Returns prior to 1825 are too incomplete to be referred to for this purpose :—

	TOTAL ADMISSIONS.				TOTAL DEATHS.			
	By Acute Diseases.	By Chronic Diseases.	By Surgical Diseases.	Total by all Diseases.	By Acute Diseases.	By Chronic Diseases.	By Surgical Diseases.	Total by all Diseases.
In 12 Januarys .	225	30	203	458	8	..	..	8
12 Februarys .	214	19	144	377	10	3	1	14
12 Marches .	243	50	174	467	11	3	1	15
12 Aprils . .	261	20	201	482	9	6	..	15
12 Mays . .	318	33	219	570	10	3	2	15
12 Junes . .	268	19	189	476	9	1	..	10
12 Julys . .	325	21	181	527	11	3	1	15
12 Augusts .	358	32	173	568	24	8	3	35
12 Septembers	532	28	187	747	26	10	2	38
12 Octobers .	558	27	180	765	29	2	2	33
12 Novembers	458	35	166	659	11	9	4	24
12 Decembers	342	22	180	544	15	2	1	19
Total . .	4,102	336	2,202	6,640	173	50	17	240

Table LXV.  
Showing the influence of the Seasons in producing Sickness and Mortality among Troops at the Bahamas.

From these results, there can be no doubt that the most unhealthy months of the year, at this station, extend from August to December ; the most healthy, from January to June. In this Table, the admissions and deaths among the white troops do not appear to have been included in some of the years ; but their numbers are too few to affect the deductions in any material degree.

## IV.—HONDURAS.

Lat. 17° to 19° N.; Long. 88° to 90° W.

IV.  
*Honduras*  
*Command.*

## General Description.

THIS settlement lies on the southern portion of the North American continent. The sea-coast is low and studded with small islands; but the ground, at a considerable distance inland, rises into a bold and rugged country, intersected by several rivers, and covered with forests of large trees, and an immense variety of vegetable productions.

The town of Belize, the capital of the settlement, is built on the banks of a river of that name. The ground on which it stands is very low, and principally composed of ballast deposited by the shipping. During the rains, it is so flooded in many parts that, from the want of drainage, pools of stagnant water are formed, which remain during the greater part of the wet season. To the north of the town is a very extensive morass, from two to three miles in circumference. Indeed, the whole neighbourhood, to a considerable distance, is interspersed with swamps and marshes, which, during the wet season, are covered with water.

## Climate and Temperature.

The seasons here are much the same as in Jamaica; but the climate is more moist and variable. The heat is generally tempered by the sea-breeze from the east and its collateral points; but, during their absence, or the prevalence of westerly winds, it is very sultry and oppressive. Changes of temperature are very sudden, the thermometer often rising 14° or 15° between the morning and noon.

The following Table exhibits its monthly range, on an average of five years, from 1829 to 1833 inclusive :—

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Average.
Maximum .	77	78	80	82½	82½	83½	84	85	84	83	79	78½	81½
Medium .	75	76	78½	80	80	81½	81½	82	83	80	77½	76½	79½
Minimum .	71½	72	76	78½	79	80	80	80½	81	78	74½	73½	77

It generally rains during five months in the year, and the quantity which falls is very considerable, but we possess no specific measurement of it.

## Troops employed.

The white troops here have generally consisted of a subaltern, with from 12 to 18 men of the Royal Artillery, and a few serjeants belonging to the 2d West India Regiment. The black troops consist of a wing of the last-mentioned corps.

## Barracks.

The artillery are stationed at Fort George; the black troops at New Town barracks. Fort George is situated about half a mile from the mouth of the Belize river, on a small, low islet, principally formed of ballast from the shipping, every vessel being obliged to deposit a certain quantity there in proportion to her tonnage. The length of the fort is 600 feet, and the breadth about 200: a few of the West India regiment are generally quartered there along with the artillery.

New Town barracks are built at the extremity of the morass, to the north of the town, above which they are slightly elevated by the long, narrow ridge of ground on which they stand. They consist of three long buildings, raised 8 or 9 feet from the ground, on blocks or pillars of wood, admitting a free access of air below and securing them from the damp. Each building is about 95 feet long, 45 broad, and 15 high from the floor, well ventilated, and capable of holding 160 men, though generally occupied by a smaller number.

## Rations and Diet.

The town and settlement are well supplied with provisions of all kinds: cattle are easily obtained from the Spanish Main; sheep from America; and poultry are abundant. Each soldier is allowed 3 lbs. of fresh and 4 lbs. of salt meat in the week, and 1 lb. of soft bread daily. The water is not in general good when obtained from wells; but measures have of late been taken for preserving the rain water in iron tanks.

The duty and employment of the troops here are much the same as at the other West India stations, and, in no respect, likely to have proved prejudicial to their health.

The extent of sickness and mortality cannot be ascertained prior to 1822. The Returns till then are supposed to have been included with those of Jamaica; but, since that period, the admissions and deaths have been as follow :—

Table LXVI.  
Showing the Admissions into Hospital and Deaths among Troops at Honduras.

WHITE TROOPS.				BLACK TROOPS.					
Years.	Mean Strength.	Admissions into Hospital.	Deaths per War-office and Medical Returns.		Mean Strength.	Admissions into Hospital.	Deaths per War-office and Medical Returns.	Ratio of Admissions per 1000 of Mean Strength.	Ratio of Deaths per 1000 of Mean Strength.
1822	13	9	..	The Numbers are too few to admit of any deductions being drawn from the Annual Ratios of Admissions and Deaths.	186	147	7	790	38
1823	15	10	3		182	99	4	544	22
1824	17	44	1		176	118	7	670	40
1825	22	20	2		175	183	5	1,046	29
1826	23	51	13		348	346	7	994	20
1827	23	39	3		312	215	10	689	32
1828	20	25	1		300	293	11	977	37
1829	20	40	1		277	287	12	1,036	43
1830	19	13	1		320	230	11	719	34
1831	30	27	1		465	432	11	929	24
1832	30	29	2		354	374	11	1,057	31
1833	24	13	2		245	308	2	1,257	8
1834	27	22	1		340	380	4	1,118	12
1835	19	21	2		339	161	7	475	21
1836	18	24	..		337	266	20	789	59
Total .	320	387	33		4,356	3,839	129	..	..
Average	21	26	2		290	262	9	881	30

Thus, among the white troops, there have been 387 admissions and 33 deaths, during the last 15 years, out of an aggregate strength of 320; making the average annual ratio of the former 1209, and of the latter 103 per thousand of the strength.

From this it would appear that sickness has been less common, but the mortality has been about a medium between what prevails in the Windward and Leeward Command and Jamaica. In general, this station is esteemed more favourable to the health of Europeans than most others in the West Indies; and so it would have proved, even by the above results, had it not been for an extremely fatal fever which prevailed in 1826, and cut off 9 out of 16 of the Royal Artillery, and 4 out of 7 of the white non-commissioned officers; which, on so small a scale of numbers, has materially increased the usual ratio of mortality.

The ratio of admissions into hospital among the black troops has been almost exactly the same as in the Windward and Leeward Command, but the mortality has not exceeded that which prevails among the same class of troops in Jamaica, viz., 30 per thousand, although it includes a loss in the last year of nearly 4 per cent. by epidemic cholera, which has not hitherto made its appearance at any of the other settlements in the West Indies.

In Abstract No. XXVI. of Appendix will be found a specific statement of every disease, whereby either an admission into hospital or death has been occasioned, during the 15 years included in this Report, from which the following Table has been compiled to exhibit the results in a more comprehensive form :—

Table LXVII.  
Showing the principal Diseases among Troops at Honduras.

	WHITE TROOPS.			BLACK TROOPS.			
	Total Admissions in 15 Years.	Total Deaths in 15 Years.		Admissions.		Deaths.	
				Total among whole Force in 15 Years.	Annual ratio per 1000 of mean Strength.	Total among whole Force in 15 Years.	Annual ratio per 1000 of mean Strength.
By Fevers . . . . .	221	27	The Numbers are too few to admit of these Totals being reduced to Ratios.	1,100	253	19	4.4
Diseases of the Lungs . .	13	1		416	95	35	8.1
,, of the Liver . . .	2	..		29	7	3	.8
,, of the Stomach and Bowels . . . . }	38	..		362	83	12	2.8
Cholera Epidemic . . .	2	..		32	8	13	3.
Diseases of the Brain . .	5	1		35	8	6	1.4
Dropsies . . . . .	4	1		11	3	7	1.6
Rheumatic Affections . .	13	..		422	97	3	
Venereal ditto . . . .	8	..		88	20	..	
Abscesses and Ulcers . .	20	..		362	83	1	
Wounds and Injuries . .	37	..		579	133	3	
Punished . . . . .	12	..		163	38	..	1.9
Diseases of the Eyes . .	3	..		95	22	..	
,, of the Skin . . .	1	..		57	13	..	
All other Diseases . . .	8	..		78	18	1	
Causes not known, the Deaths being omitted in Medical Reports . . }	..	3		..	..	26	6.
Total . . . . .	387	33		3,829	881	129	30.

With regard to the white troops, it is only necessary to remark that all the deaths but 6 occurred from remittent or yellow fever, which cut off about 1 in 4 of those attacked. Inter-mittent fevers have also been common, but never proved fatal. Diseases of the lungs and bowels have been by no means so frequent or so fatal as at the other West India stations, but the numbers are too few to warrant any positive deductions on this head.

The numbers of the black troops are, however, on a sufficiently extensive scale to insure a fair approximation to accuracy in the results. Fevers have been rather more common, but not so fatal among them as at most of the other West India stations. The greater number of admissions, however, under this class, has principally arisen from the prevalence of intermit-tents, which have constituted more than a third of the fevers treated at this station. These are always common in low, marshy situations, but rarely terminate fatally.

The climate of this station appears, also, to be much more favourable to diseases of the lungs and of the bowels than any of the others in the West Indies, at least, so far as regards this description of troops. In the other classes of diseases there is no peculiarity worthy of notice, except that epidemic cholera made its appearance at this station in August 1836, shortly after the arrival of a prize schooner from the Havannah, where it was then raging, and by which it was supposed to have been imported. Cases of it continued to appear at intervals among the black troops till the middle of January following; during which period there were, in all, 62 attacked, of whom 20 died, though, as this Report only embraces the period up to the end of December 1836, there are but 32 of the attacks and 13 of the deaths included in the preceding table.

In the month of March, previous to the appearance of this disease, influenza prevailed very generally throughout the settlement; but there was no other peculiarity, either in regard to the health of the troops or the state of the weather, observable at the time.

None of the white troops, and but few of the European population, died from cholera. The fatal cases occurred almost entirely among the negroes and natives, and it seems to have most affected those who were irregular, drunken, and dissipated. The inhabitants of the Mosquito shore, who have, in general, that character, suffered more than any other; few of them having survived an attack longer than six hours. Among all classes the disease was particularly virulent in its character, and recovery seemed rather to depend on superior vigour of constitution than any remedial means employed.

In the adjacent states of Central America this disease committed dreadful havoc. At St. Salvador, a seventh part of the population was cut off by it, and whole villages were depopulated.

The deaths of white and black troops, for which no causes have been assigned, are those included in the War Office, but not in the Medical Returns, and probably arose from accidents, suddenly, or among detachments to which no medical officers have been attached.

The number of admissions and deaths is rather too small to determine the relative salubrity of each month with any degree of accuracy; we have, therefore, not submitted the usual Table on this head; but, so far as the results go, it appears that from July to November is the most unhealthy period of the year, and that there is very little difference in the relative salubrity of the other months.

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This completes all the details regarding the sickness, mortality, and prevailing diseases throughout the West India Commands. There are, however, several other topics intimately connected with the same subject which we shall now proceed to consider in the following sections,

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## SECTION II.

*On the Extent of Invaliding among Troops in the West Indies.*

It is to be regretted that, on this head, we possess by no means such specific information as has been adduced in regard to the extent of sickness and mortality; and what we do possess, cannot be arranged so as to exhibit the same satisfactory results, it being impossible, in most cases, to distinguish those who have been discharged when labouring under no other disability than that incident to advanced age and length of service, from those discharged at an earlier period in consequence of disabilities which may have been caused by the climate.

The main object hitherto kept in view in this Report has been to establish, as accurately as possible, the influence of the climate of the West Indies on the constitution of the troops employed there; but it is obvious, so long as these two classes of invalids are blended together, no accurate deductions can possibly be drawn on that head. By the present regulations, every soldier, however long he may have been in the army, must have some disability assigned for his discharge, though, perhaps, the real cause of his unfitness for the service is only the usual infirmities of age; consequently, as in the healthiest stations, many are discharged annually on this account, while, in the unhealthy ones, few survive to that period of life, the mere numbers invalided can afford no direct proof of the insalubrity of a station, but rather the reverse.

With these remarks, then, to guard against any erroneous impression which might otherwise be conveyed, we shall proceed to submit all the information obtainable from the Medical Returns on this head.

Prior to 1825, the number of invalids who arrived at Chatham from all the West India stations were blended together, and are thus stated:—

Years.	Total Force of White Troops in West Indies.	Total sent home invalided in each Year.	Ratio per 1000 of Mean Strength invalided.
1817	8,405	None.	..
1818	6,556	252	38
1819	6,321	231	36
1820	5,567	None.	..
1821	6,245	116	19
1822	5,840	122	21
1823	5,542	206	37
1824	6,814	213	31
Total .	51,290	1,140	22

As, in this Table, no distinction is made between those sent home on account of advanced age, or disabilities contracted in the climate, and those who merely required change of air for the recovery of their health, and were afterwards sent back to their corps, it is impossible to draw from it any accurate conclusions.

Since 1825, however, the Returns of invalids from these two Commands have been kept separate, and a distinction has been made between those who were sent home and ultimately discharged, and those who recovered and rejoined their corps; by which means we are enabled to supply the following details on that subject:—

Years.	Mean Strength of White Troops employed in Windward & Leeward Command.	Discharged totally unfit for further Service.	Found fit for Garrison Duty only.	Total of both Classes.	Ratio per 1000 of Strength in both Classes.
1825	4,466	165	..	165	37
1826	4,549	237	..	237	52
1827	4,310	282	25	307	71
1828	4,202	141	15	156	37
1829	4,164	52	30	82	20
1830	4,601	22	8	30	7
1831	4,232	27	17	44	10
1832	4,331	42	6	48	11
1833	4,823	61	2	63	13
1834	5,407	58	4	62	12
1835	5,462	79	7	86	16
1836	4,983	55	1	56	11
Total .	55,530	1,221	115	1,336	24

Table LXVIII.  
Showing the Ratio Discharged annually, as unfit for active Service, of White Troops in the Windward and Leeward Command.



## Invaliding.

Besides these, there were, in the course of the same period, about 350 men sent home who were not discharged, but recovered and returned fit for service to their corps or depôts. Those found fit for garrison duty only are understood, in most cases, to have been ultimately discharged, as well as those found totally unfit for further service; and, therefore, in calculating the ratios they have been included together.

The disabilities of those found fit for garrison duty only, cannot be stated; but the following Table shows the disabilities of those discharged as totally unfit for further service:—

Table LXIX.  
Showing the Dis-  
eases, or causes of  
Disability of those  
Discharged as unfit  
for further Service.

Diseases, or Causes of Disability.	1825	1826	1827	1828	1829	1830	1831	1832	1833	1834	1835	1836	Total.
Cachexias . . . . .	8	..	1	..	..	1	..	..	4	3	1	..	18
Dropsies . . . . .	5	10	2	16	8	2	7	3	6	9	8	2	78
Dysentery and Hepatic.	52	22	7	14	1	5	4	8	6	11	5	3	138
Eye Diseases . . . . .	7	19	20	13	2	1	5	5	5	8	14	3	102
Fractures, Dislocations, Contractions, and Ruptures . . . . .	17	39	39	18	5	1	2	9	8	5	6	2	151
Mental Diseases . . . . .	4	1	..	2	4	2	..	1	4	2	..	2	22
Paralysis, Epilepsy, and Deafness . . . . .	2	5	4	4	1	3	1	..	6	2	6	4	38
Pulmonic Diseases . . . . .	22	15	24	18	7	4	3	6	12	12	26	18	167
Rheumatism and Chro- nic Pains . . . . .	27	23	9	24	6	3	1	8	6	3	6	9	125
Ulcers, Strictures, and Varices . . . . .	17	8	6	6	7	..	1	..	3	3	5	4	60
Venereal . . . . .	1	..	..	1	..	..	..	..	..	..	..	..	2
Worn Out . . . . .	41	103	170	25	11	..	3	2	1	..	2	8	366
	203	245	..	..	..	..	..	..	..	..	..	..	1267
Deduct returned to their Corps as fit for Ser- vice in 1825 and 1826, included in the above	38	8	..	..	..	..	..	..	..	..	..	..	46
Total . . . . .	165	237	282	141	52	22	27	42	61	58	79	55	1221

We shall not attempt to reduce the numbers invalided for each of these disabilities to ratios per thousand of the strength, as was done with regard to the fatal diseases; because, unless we knew what proportion was really the effect of climate, the result would only lead to error.

Similar defects exist in regard to the invalids from Jamaica, of these we shall, therefore, only submit the numbers and alleged causes of disability in the two following Tables, without attempting to draw any deductions therefrom:—

Table LXX.  
Showing the Ratio  
Discharged annu-  
ally, as unfit for ac-  
tive Service, of  
White Troops in  
Jamaica.

Years.	Mean Strength of White Troops employed in Jamaica.	Discharged as totally unfit for further Service.	Found fit for Garrison Duty only.	Total of both Classes.	Ratio per 1000 of Strength in both Classes.
1825	2,512	111	..	111	44
1826	2,039	24	..	24	12
1827	2,795	36	3	39	14
1828	2,536	52	19	71	28
1829	2,709	18	8	26	10
1830	2,842	6	5	11	4
1831	2,232	29	3	32	14
1832	2,046	10	1	11	5
1833	2,815	32	6	38	13
1834	3,016	22	1	23	8
1835	2,881	32	23	55	19
1836	2,985	53	2	55	18
Total .	31,408	425	71	496	..
Average	2,617	35	6	41	16

Within the same period, about 200 of those who had been sent home invalided recovered and returned fit for duty to their corps. Those found fit for garrison duty only are understood to have been, in most instances, discharged, as well as those found totally unfit for service; and, therefore, they have both been included in estimating the average ratio discharged.

The causes of disability are thus stated in the Medical Returns:—

Diseases, or Causes of Invaliding.	1825	1826	1827	1828	1829	1830	1831	1832	1833	1834	1835	1836	Total.
Cachexies . . . . .	1	1	..	..	..	..	..	..	1	2	3	1	9
Dropsies . . . . .	6	..	..	1	..	..	..	..	2	3	3	2	17
Dysentery and Hepatic .	20	2	5	2	..	1	2	1	..	1	..	2	36
Eye Diseases . . . . .	14	1	12	9	5	1	6	7	6	2	1	4	68
Fractures, Dislocations, Contractions, Wounds, and Ruptures . . . . .	28	1	6	8	1	1	2	1	6	3	4	6	67
Mental Diseases . . . . .	1	..	1	..	1	..	4	..	4	1	2	3	17
Paralysis, Deafness, and Epilepsy . . . . .	3	..	1	5	4	..	..	..	1	5	1	4	24
Pulmonic Diseases . . . . .	29	7	2	5	..	1	3	..	2	1	6	15	71
Rheumatism and Chronic Pains . . . . .	21	3	1	2	1	..	1	..	2	1	3	5	40
Ulcers, Varices, and Strictures . . . . .	10	1	4	2	4	1	2	1	3	2	3	4	37
Venereal . . . . .	4	..	..	..	..	..	..	..	..	1	..	..	5
Worn out . . . . .	29	8	4	18	2	1	9	..	5	..	6	7	89
	166	..	..	..	..	..	..	..	..	..	..	..	480
Deduct, returned to their Corps, fit for Duty, in 1825, included in the above . . . . .	55	..	..	..	..	..	..	..	..	..	..	..	55
Total . . . . .	111	24	36	52	18	6	29	10	32	22	32	53	425

Table LXXI.  
Showing the Diseases, or causes of Disability, of those discharged as unfit for further service.

A comparison of the proportions invalided in these two Commands, and in this country, will afford a practical illustration that, from such *data*, no inference can be drawn as to the insalubrity of a climate.

In Jamaica, for instance, where the annual mortality, from all causes, is 143 per thousand, the extent of invaliding is only 16 per thousand of the strength annually. In the Windward and Leeward Command, where the annual mortality, from all causes, is 85 per thousand, the extent of invaliding is 24 per thousand of the strength annually. But, in Great Britain, where the annual mortality is only 15 per thousand, the extent of invaliding, even among the Dragoon Guards and Dragoons, who rarely serve abroad, is 26 per thousand of the strength annually.

As the invalids from the black corps are not sent to this country, our materials do not supply any information regarding them, though it is an object of much importance to have the extent of invaliding and nature of the disabilities among that class accurately ascertained; also, the average period of service prior to being discharged, and the rate of pension awarded, in order that the ultimate expense attending their employment may be compared with that of white troops.

As the garrisons at the Honduras and Bahamas have consisted of late years almost entirely of black troops, there are no Returns to show the extent of invaliding there.

## SECTION III.

*On the Number constantly Sick in Hospital of the Troops serving in the West Indies.*

*West Indies.*  
—  
Mean Sick.

In Abstract No. XXVI. of Appendix will be found a detailed statement of the number reported sick in the War Office Returns on the muster-day of each month, from which the following Table has been compiled, to exhibit the results in as comprehensive a form as possible :—

Table LXXII.  
Showing the Number constantly Sick in Hospital of the Troops in the West Indies.

Years.	WINDWARD AND LEEWARD COMMAND.				JAMAICA.	
	WHITE TROOPS.		BLACK TROOPS, EXCLUSIVE OF PIONEERS.		WHITE TROOPS ONLY.	
	Average constantly Sick.	Ratio per 1000 of Mean Strength constantly Sick.	Average constantly Sick.	Ratio per 1000 of Mean Strength constantly Sick.	Average constantly Sick.	Ratio per 1000 of Mean Strength constantly Sick.
1817	676	132	170	52	} Cannot be stated.	accurately
1818	540	128	54	32		
1819	301	79	66	45	148	58
1820	247	67	41	33	160	84
1821	283	78	39	34	182	70
1822	230	70	41	38	155	61
1823	360	110	46	44	149	65
1824	246	59	32	32	188	70
1825	336	75	22	39	209	83
1826	340	75	14	29	105	52
1827	413	96	19	38	222	80
1828	404	96	23	44	116	46
1829	339	81	39	55	142	52
1830	385	84	24	35	134	47
1831	366	87	23	34	137	61
1832	362	84	24	37	122	60
1833	409	85	29	46	204	72
1834	432	80	35	54	214	71
1835	424	87	35	57	167	58
1836	448	90	23	41	155	52
General Average }	377	87	40	42	162	63

This Table shows that out of every thousand white troops there are 87 constantly ineffective from sickness in the Windward and Leeward Command, and 63 in Jamaica, though the latter is by far the most unhealthy. This peculiarity arises from four-fifths of the mortality in Jamaica being caused by fevers which rapidly terminate either in death or recovery, and only one-fifth from lingering diseases, such as those of the lungs and of the bowels; whereas, in the Windward and Leeward Command, scarcely half of the deaths are caused by fever, and almost all the others are by diseases which detain the patient long in hospital.

From this it will be understood how, during the ravages of epidemic fever, there may be a very great mortality without the hospital being much more crowded than usual. Take, for instance, the numbers constantly sick of the white troops in Jamaica at two periods of the same year, one extremely healthy, the other the reverse :—

		Reported Sick in each Month.	Deaths in each Quarter.
1st April,	1827 . .	237	} 12
1st May,	,, . .	236	
1st June,	,, . .	194	
1st July,	,, . .	251	} 252
1st August,	,, . .	267	
1st September,	,, . .	273	

Thus the mortality, in this instance, increased twenty-fold, without the average number in hospital being materially augmented: but the admissions during the last three months were almost entirely from attacks of severe epidemic fever, which rapidly terminating either in death or recovery, one patient soon made way for another, and a whole corps might thus have passed through the hospital in the course of a few weeks, without the proportion of ineffectives,

as shown by the Returns, exhibiting any extraordinary increase, consequently this Table affords no criterion whatever for estimating the insalubrity of a station, unless combined with the number of patients treated, and what proportion ultimately died or recovered.

This will serve to explain the reason why the number constantly sick among the white troops in such an unhealthy climate as the West Indies is so little above that of troops in the United Kingdom, where, even among the most healthy class who have never served abroad, 40 per thousand have been constantly ineffective from sickness on the average of the last seven years, which is only 23 per thousand less than in Jamaica, though there is so remarkable a difference in the mortality.

Since it has been ascertained that 87 are constantly sick out of every thousand troops serving in the Windward and Leeward Command, that number, multiplied by 365, shows the annual number of days' sickness to 1000 soldiers to be 27,755, or to each about 27½ days in the course of the year, and 27,755, divided by 1903, the average number of admissions, shows the duration of each attack in that climate to be 14½ days.

Pursuing the same calculation with regard to Jamaica, we find that each soldier is subject to 23 days of sickness in the course of the year, and that the average duration of each attack is 13½ days. For the purpose of comparison it may also be stated, that among troops serving in the United Kingdom, the average extent of sickness in the course of a year is 14½ days to each soldier, and the average duration of each attack 16 days.

Of the black troops, the number constantly ineffective from sickness is only about the same as among white troops in this country, viz., 42 per thousand, though the mortality is nearly treble. Each soldier has about 15 days of sickness in the course of the year, and the average duration of each attack is 19 days. This refers only to the soldiers of the West India corps, for the Returns are not sufficiently specific to admit of similar deductions being drawn in regard to the Black Pioneers.

SECTION IV.

On the Influence of Age and Length of Residence on the Mortality among Troops serving in the West Indies.

THERE are no materials for drawing conclusions on either of these important points prior to 1830, when Annual Returns, showing the composition of each corps in regard to age and service, as well as the age of each soldier deceasing, were first transmitted to the War Office. A summary of the Returns received since that period, so far as they are applicable to our purpose, will be found in Abstract Nos. XXVII. and XXVIII. of Appendix, from which the following results have been obtained :—

Influence of  
Age.

General Results for Windward and Leeward Command, from 1st January 1830 to 31st March 1837.

PERIODS.	Under 18 Years.		18 to 25.		25 to 33.		33 to 40.		40 to 50.		Total of all Ages.		Ratio of Deaths per Thousand of Strength of all Ages.
	Strength.	Died.	Strength.	Died.	Strength.	Died.	Strength.	Died.	Strength.	Died.	Strength.	Died.	
1st January to 31st December 1830 .	31	..	1873	96	1322	99	510	41	86	12	3822	248	65
"                    "          1831 .	29	..	1851	104	1264	122	415	40	57	3	3616	269	74
"                    "          1832 .	39	..	2059	107	1544	118	410	54	63	14	4115	293	71
"          1833 to 31st March 1834 .	31	..	2174	79	2229	180	428	54	80	9	4942	322	65
1st April 1834                    "          1835 .	33	..	1662	63	2499	140	592	68	105	11	4891	282	58
"          1835                    "          1836 .	32	..	1173	49	2573	192	588	47	125	13	4491	301	67
"          1836                    "          1837 .	49	1	1580	137	2202	189	612	54	93	16	4536	397	87
Total for 7½ Years . . . . .	244	1	12,372	635	13,633	1040	3555	358	609	78	30,413	2112	..
Deduct a 29th part of the Deaths to ascertain the Mortality of 7 Years exactly . . . . .	..	..	..	22	..	36	..	12	..	3	..	73	..
Total for 7 Years . . . . .	244	1	12,372	613	13,633	1004	3555	346	609	75	30,413	2039	67

PERIOD.	Under 18 Years.		18 to 25.		25 to 33.		33 to 40.		40 to 50.		Total of all Ages.		Ratio of Deaths per Thousand of the Strength of all Ages.
	Strength.	Died.	Strength.	Died.	Strength.	Died.	Strength.	Died.	Strength.	Died.	Strength.	Died.	
1st January to 31st December 1830	7	2	1198	98	784	80	172	30	37	4	2198	214	97
" " " 1831	8	1	916	126	862	110	188	40	22	7	1996	284	142
" " " 1832	8	..	907	99	812	92	175	23	16	5	1918	219	114
" " 1833 to 31st March 1834	9	1	1294	80	1083	159	274	42	60	15	2720	297	109
1st April 1834 " " 1835	10	..	949	47	796	76	227	25	61	6	2043	154	75
" " 1835 " " 1836	20	..	1442	67	1054	100	246	28	76	5	2338	200	70
" " 1836 " " 1837	26	1	1353	65	1216	113	265	22	80	5	2940	206	70
Total for 7½ Years	88	5	8059	582	6607	730	1547	210	352	47	16,653	1574	..
Deduct a 29th part of the Deaths to ascertain the Mortality of 7 Years exactly	..	..	..	20	..	25	..	7	..	2	..	54	..
Total for 7 Years.	88	5	8059	562	6607	705	1547	203	352	45	16,653	1520	91

These results do not extend over all the troops in the Command, as the artillery do not furnish any return of ages to the War Office, and a few of those from the other corps have necessarily been omitted, as errors have been discovered in them; consequently the general ratio of deaths cannot correspond exactly with the previous part of the Report.

As the numbers serving, at the above ages are so very different, no deduction can be drawn from the deaths in each class till we have first reduced them to a common ratio, and thereby determined what the mortality would have amounted to annually if the strength of each class had been alike. For this purpose the following Table has been compiled:—

Table LXXIII.  
Showing the influence of Age on Mortality among Troops in the West Indies.

WINDWARD AND LEEWARD COMMAND.				JAMAICA COMMAND.			
Age.	Aggregate Strength at each Age in Returns of Seven Years.	Total Deaths at each Age in Returns of Seven Years.	Annual Ratio of Deaths per Thousand Living at each Age.	Age.	Aggregate Strength at each Age in Returns of Seven Years.	Total Deaths at each Age in Returns of Seven Years.	Annual Ratio of Deaths per Thousand Living at each Age.
Under 18	244	1	4	Under 18	88	5	57
18 to 25	12,372	613	50	18 to 25	8,059	562	70
25 to 33	13,633	1,004	74	25 to 33	6,607	705	107
33 to 40	3,555	346	97	33 to 40	1,547	203	131
40 to 50	609	75	123	40 to 50	352	45	128
Total	30,413	2,039	67	Total	16,653	1,520	91

The numbers under 18 years of age are too few to found thereon any definite conclusions, but they seem to warrant the inference that in the West Indies, as in this country, such persons are less subject to mortality than those at a more advanced period of life. The influence of age in increasing the mortality among the other classes will best be comprehended by a comparison of the above results with what occurs among the civil population of Great Britain, at the same ages:—

	Annual ratio of Mortality per Thousand living at the following Ages.			
	18 to 25.	25 to 33.	33 to 40.	40 to 50.
In civil life in England by Carlisle tables	7	8·9	10·7	14·1
Among Troops in the Windward and Leeward Command	50	74.	97.	123.
Among Troops in Jamaica Command.	70	107.	131.	128.

Thus, instead of the mortality among our troops in the West Indies decreasing with the advance of age, as has been the general impression, it increases with infinitely greater rapidity than in this country; and the same has been found to take place at every station, whether temperate or tropical, to which similar investigations have extended.

That the mortality in Jamaica is, in a small degree, lower, between the age of 40 and 50, than between 33 and 40, does not arise from any improvement in constitution, but from the large proportion of men of that class who are invalided and sent home, which has often prevented them from being exposed to the climate during the whole of the year for which the calculation has been made.

This progressive increase of mortality with the advance of age, not only corresponds with what is shown by the Carlisle Tables, and the experience of the Equitable Insurance Com-

pany, as published by Mr. Davies, but also with the following observations taken in different kingdoms, and extended over at least twenty millions of people :—

AGES.	Annual Mortality out of every 1000 living, of both sexes, at the following Ages, in		
	England.	Belgium.	Sweden.
	By Population Returns 1813-30.	By Population Returns 1829.	By Population Returns 1811-20.
Between 15 and 20 .	7·4	6·6	6·2
„ 20 and 30 .	10·2	9·1	9·5
„ 30 and 40 .	11·9	10·	12·9
„ 40 and 50 .	14·9	13·6	17·

See M'Culloch's Statistics of Great Britain, vol. ii., p. 568.

Persons who make themselves acquainted with the laws which regulate mortality, will see little reason for adhering to the general belief that soldiers, either in the West Indies or other tropical climates, are more liable to it at an early than an advanced period of life. We are quite aware that these conclusions are by no means in unison with those generally entertained in the army; but as they rest on facts the accuracy of which cannot be disputed, we trust they will be sufficient to displace hypothetical opinions, which have principally originated in the want of accurate statistical information on this subject.\*

Prior to the present investigation, the only fact on which any opinion could be founded, was the specification of the ages of the fatal cases, which generally accompanied the medical returns. No reference whatever was made to the composition of the corps in respect to age, nor to the fact that in these unhealthy climates there were at least three men in the corps under thirty for one above that age; and that consequently it was to be expected the deaths among the younger classes would, in point of numbers, considerably exceed those among the older ones, even though the relative proportion dying out of those exposed to the climate was much smaller in the former than in the latter. It has thus been from the want of that basis of all statistical inquiries,—an accurate knowledge of the number living at each age, as well as of those who died at that age,—that an opinion so directly contrary to the fact has been generally entertained.

It no doubt has occasionally happened, that in particular corps the mortality among the younger classes has proved higher than among the older ones, and a few of these instances may be noticed in the abstract of ages on which these deductions are founded. The laws of mortality are by no means so uniform in their operation when the scale of numbers is limited, that such peculiarities may not be met with; but wherever the field of observation can be extended, they are immediately lost in the general mass, and instead of being attributable to any deviation from Nature's laws, they are found to arise merely from the limited sphere of our own information. This circumstance has probably tended to confirm the error regarding young soldiers suffering most in tropical climates, as Commanding Officers may have brought to notice solitary instances in which the mortality has fallen most heavily on that class, without taking into view the increased mortality in other years among the senior classes, by which it was probably counterbalanced. The one they would look upon as a remarkable occurrence worthy of being reported, the other as of less importance; seeing that the death of a number of persons at an early period of life is always sure to create a stronger impression than that of a similar number further advanced in years.

It is possible, however, where recruits have been sent out to corps in the West Indies immediately after their enlistment, and had to encounter all the extra fatigue and exposure attending their drill and discipline in that climate, as we believe was frequently the case before the division of regiments into depôt and service companies in 1825, that the mortality among them may have greatly exceeded its present amount, and proved another source of the common error on this subject. This mortality, however, should have been attributed,

\* It may, perhaps, tend to facilitate conviction on this head, that it has recently been ascertained, that the mortality from fever in this country is materially influenced by the age of the patient, as will be seen from the following statement of the number who died out of every hundred cases treated, at the following ages, in three of the principal London Hospitals :—

Age of Patients.	Died per Cent.	Died per Cent.	Died per Cent.
20 to 30. . .	6·8	19·6	14·3
30 to 40. . .	8·8	26·4	19·5
40 to 50. . .	11·7	34·8	26·2

See Medical Almanac for 1837.

Now, as fever occasions half of the deaths in the Windward and Leeward Command, and more than three-fourths of those in Jamaica, it is impossible, if its fatal tendency is regulated by the same laws in regard to age as in this country, that the mortality there, at an early period of life, can be the same as at a more advanced age.

not to the constitutions of recruits being less adapted for the climate at that age, but to the extra fatigue and exposure to which they were necessarily liable in acquiring a knowledge of their duty as soldiers.

The result of a recent investigation by the Secretary of the Bengal Government into the casualties at different ages among the civil and military servants in that Presidency strikingly confirm these deductions as to the progressive increase of mortality with the advance of age in tropical climates.

For instance, out of 1184 deaths among officers in that Presidency, the proportion occurring annually in each rank, and at each age, has been as under :—

	Colonels, average Age 61.	Lieut.- Colonels, average Age 51.	Majors, average Age 40.	Captains, average Age 36.	Lieutenants, average Age 18 to 33.	Cornets and Ensigns, average Age 18 to 33.	General Average at all Ages.
Died annually per Thou- sand of each rank . . }	59·4	48·4	41·0	34·5	27·5	23·4	31·2

The mortality among the civil servants there, for a period of forty-six years, from 1790 to 1836, exhibits almost precisely the same results, viz. :—

	Above 50 Years of Age, and 30 of Service.	Age 45 to 50; Service 25 to 30.	Age 40 to 45; Service 20 to 25.	Age 35 to 40; Service 15 to 20.	Age 30 to 35; Service 10 to 15.	Age 25 to 30; Service 5 to 10.	Age 20 to 25; Service 1 to 5.
Died annually per Thou- sand of each class . . }	48·6	36·4	35·4	23·4	16·6	20·8	19·9

Between 10 and 15 years' service is the period when leave of absence is allowed to those who choose to return to Europe for three years, which of course must have a material tendency in reducing the mortality of that class. With this exception the results are uniform for both civil and military servants, and they are no less so when extended to the officers of the other Presidencies.

Whether the liability to disease, and consequent inefficiency from sickness in the West Indies also increases as the soldier advances in age, is a question on which at present we possess no direct proof; but the following series of very extensive observations shows this to be the case among the population of Great Britain, and we may infer also among her troops abroad.

Constantly Sick out of every 1000 at the following Ages.				Average Duration of Sickness per Annum for every Man employed in Ports- mouth and Plymouth Dock Yards.
AGES.	By calculations of Benefit Societies.		By Observations on Corps of East India Com- pany's Labourers in London.	
16 to 20	England. ..	Scotland. ..	11·	Days. 4·02
20 to 30	15·4	11·4	13·6	4·94
30 to 40	18·3	13·2	13·8	5·06
40 to 50	25·6	19·7	14·6	5·31

See M'Culloch's Statistics of Great Britain, vol. ii., p. 576.

This table shows that the liability to sickness at each age is regulated in this country by similar progressive laws to those of mortality, and if the same is the case in the West Indies, of which there seems little doubt, then unquestionably soldiers at an early period of life must be more efficient for duty, and seldomer in hospital than such as are more advanced in years.

By this portion of our investigation, then, we arrive at the important inference that should there be no extra fatigue to be endured, no active warfare, no long marches to be encountered, the best age at which soldiers can be sent to the West Indies is from 18 to 25; and as few enlist till 18, we are perhaps also warranted in asserting, that after being properly drilled, and having acquired a knowledge of their duties, the sooner they proceed to the service companies the better. Those, however, who belong to the classes above 33, should, if possible, be left at the depôts, they form a very small portion of the composition of corps, probably not above a seventh or an eighth; and as the mortality even between 33 and 40 is double, and between 40 and 50 treble, what it is between 18 and 25, instead of adding to the efficiency of the service companies abroad, they only crowd the hospitals, or put the country to the expense of their passage home again as invalids in the course of a few months, whereas it is possible that for service in Great Britain they might be nearly as effective as younger men.

As the mortality goes on progressively increasing, and that too in a very high ratio, the most valuable portion of a soldier's service seems to be the first ten years. If, indeed, we are to judge of the liability to sickness in the West Indies by the ratio of mortality, he must be at least twice as often in hospital after that period as he has been before. We beg, however, it may be distinctly understood, that we draw no inference that the same rule will apply during a period of active warfare, as during one of profound peace. The ablest generals, both of our own and foreign armies, combine in attesting the superiority for operations in the field of veteran soldiers over young recruits, particularly as regards the endurance of fatigue, and those numberless hardships to which they are then subject. But that case, it must be recollected, is very different from the present, for perhaps in no climate does the soldier undergo less bodily fatigue than in the West Indies; indeed, from the limited extent of each island, he has rarely a march even of a few miles to perform. Our results are intended only to show the influence of the climate of that country in producing mortality at various ages among troops, when subject to no other predisposing causes of disease than what arise from the ordinary duties of a soldier in garrison and during peace.

Officers whose ideas on this subject have been founded on their experience in the field, are too apt to estimate the degree of mortality among soldiers of different ages by their relative capabilities for enduring fatigue, and having seen young men sink under the hardships of a campaign more rapidly than those of riper years, are forthwith led to the inference that the same effect is likely to be produced by exposure to a tropical climate.

This important distinction must however be borne in mind, that though man does not attain his full strength till about the age of 25, that is far from being the period at which he is least subject to mortality. On the contrary, twice as large a proportion die at that vigorous period of life as during the age of puberty, when the bodily strength is not half so great. This will best be illustrated by the following comparison of the ratios at which the mortality and physical strength progressively increase from the age of 14 to 25:—

AGE.	Ratio of Mortality per Thousand of each Age, by Government Tables.	Relative Strength at each Age, as ascertained by the Dynamometer*.	
		Of the Loins.	Of the Hands and Arms.
14	60	8·1	47·9
15	69	8·8	57·1
16	80	10·2	63·9
17	93	12·6	71·
18	109	13·	79·2
19	124	13·2	79·4
20	137	13·8	84·3
21	145	14·6	86·4
22	150	..	..
23	151	..	..
24	149	..	..
25	145	15·5	88·7

If, then, young soldiers, who possess little more than half the strength, have the same long marches to perform under a heavy burden, and the same fatigues and hardships to undergo as full-grown men, which must always be the case during a period of active warfare, it is quite possible their liability to sickness and mortality will be so much augmented as considerably to exceed that of their seniors; but this by no means leads to the inference that the same effect will be produced in these times of peace, when no such deteriorating cause is in operation, and when the young soldier has rarely any duty to perform to which his strength is not fully adequate. Under such circumstances it is but natural that mortality should follow the same law in the military profession as in any other.

Having thus ascertained what proportion of the mortality in these two Commands has taken place at the different periods of life above specified, we shall next apply this information to determine whether that has been increased or diminished by length of residence in the West Indies, or, as it is technically called, by acclimatization.

Of the drafts from the depôts, by which the establishment of regiments in the West Indies is kept up, the great mass are young soldiers. Take, for instance, the following extract of the ages of those who joined between 1830 and 1835:—

\* See Quetelet, Sur l'Homme.



Influence of length  
of Residence.

WINDWARD AND LEEWARD COMMAND.							JAMAICA COMMAND.						
Years.	Under 18.	18 to 25.	25 to 33.	33 to 40.	40 to 50.	Total of all Ages.	Years.	Under 18.	18 to 25.	25 to 33.	33 to 40.	40 to 50.	Total of all Ages.
1830	..	121	31	6	2	160	1830	5	160	54	19	3	241
1831	1	66	14	3	..	84	1831	..	1	1	..	..	2
1832	8	206	61	27	3	305	1832	..	..	..	..	..	..
1833	2	560	125	88	14	739	1833	5	463	92	21	8	589
1834	8	122	71	14	1	216	1834	2	140	13	3	..	158
Total *.	19	1075	302	88	20	1504	Total .	12	764	160	43	11	990

Thus, about three-fourths of those who joined the service companies from the depôts during these years were between the ages of 18 and 25, and as it is by no means probable soldiers of that age could have served in the country before, it may be fairly assumed these were all unacclimatized men. Indeed, in corps which have been on the West India station for six or seven years, nearly the whole of that class must be composed of men who went out subsequently to the head-quarters, and who consequently must have been less inured to the climate than those who preceded them. If length of residence then had the effect of creating any diminution of mortality, it would be shown by the ratio in the classes above 25 being lower than between 18 and 25. The reverse of this, however, we find to be the case; indeed, it would appear to follow as a direct corollary from the fact of young soldiers being less subject to mortality than old ones, that no length of residence, however protracted, is likely to be of any avail in diminishing their liability to the fatal diseases of this climate.

As Jamaica is the station in which of all others the benefit of length of residence has been most strongly insisted on, and where, if any advantage could possibly accrue from it, it would in all probability be most apparent, we shall, as a test of the accuracy of this conclusion, refer to the following statement of the deaths during the first two years of residence among each draft which joined the service companies in that island during the last seven years:—

Table LXXIV.  
Showing the rate of  
Mortality during the  
first two years in  
each draft which ar-  
rived in Jamaica  
from 1830 to 1836  
inclusive.

Regiment.	Date of arrival of the Draft in Jamaica.	Number who joined the Service Companies.	Died within one year after joining.	Remained alive at commencement of second year.	Died in second year of residence.	REMARKS.
33d Foot	November, 1830	12	2	..	..	{ Left Jamaica before second year was completed.
22d ,,	January, 1830	52	5	47	9	
	April and May, 1833	190	10	180	24	{ Second year's returns not yet received.
	March, 1834	43	2	41	3	
	January, 1835	9	1	8	..	
	December, 1835	83	2	..	..	
84th ,,	January, 1830	71	7	64	11	Ditto.
	April and May, 1833	145	13	132	7	
	March, 1834	43	..	43	2	
	November, 1834	41	..	41	2	
37th ,,	January, 1836	23	2	..	..	Ditto.
	May, 1833	39	2	37	..	
	April, 1834	54	3	51	1	Ditto.
	November, 1834	37	1	36	6	
56th ,,	January, 1836	56	9	..	..	Ditto.
	April and May, 1833	66	5	61	3	
	May, 1834	20	..	20	..	Ditto.
	December, 1834	47	2	45	2	
64th ,,	January, 1836	69	5	..	..	Ditto.
8th ,,	January, 1836	57	3	..	..	
	April, 1834	18	3	15	4	Ditto.
	January, 1835	63	12	51	2	
	January, 1836	92	5	..	..	{ Left Jamaica before second year was completed.
77th ,,	April and May, 1833	150	20	..	..	
Totals . . . .		1,480	114	872	76	

\* The ages of some of these recruits could not be accurately ascertained, and have consequently been omitted.

In the course of seven years, therefore, the numbers and deaths of those least acclimatized, compared with those who had been longer in the island, were respectively as follows :—

Influence of length  
of Residence.

	The Total Strength was	The Total Deaths,	Annual Ratio per Thousand of Strength.
Of those under one year's residence . . .	1,480	114	77
Of those above one but under two ditto .	872	76	87
Total under two years' residence . . .	2,352	190	81
The total strength and deaths of all classes in the service companies of these corps was, during the same period }	16,653	1,520	91
The difference shows the strength and deaths of those who were longer than two years resident in the island to have been. . . . . }	14,301	1,330	93

Thus, while the annual mortality among those resident one year only was 77, and of those two years resident 87 per thousand, the mortality among those who had been longer in the island averaged 93 per thousand. We have restricted our observations to the first two years of residence, because it is during that period the influence of the climate is supposed most to affect those recently arrived, and it would have been an excessively tedious operation to have carried on the investigation with similar accuracy for the subsequent years.

In preparing this statement reference has been made both to the War Office and to the Medical Quarterly Returns, so that there can be little doubt of the accuracy of the results. They would have been still more favourable to those newly arrived, had there not been among the drafts several soldiers of advanced age, who appear to have served formerly on the island, and who died shortly after their return to it.

Were we to look to the deaths which occurred in each draft individually, several instances might be found in which about a fifth or a sixth part has been cut off in the course of a year. These have no doubt been noticed and reported, while the numerous instances in which no such mortality took place have passed unheeded. At almost all the periods when the epidemic fever raged with great severity shortly after the arrival of the drafts they seem to have suffered in rather a higher proportion than the old soldiers, but so soon as the sickness and mortality sunk to its ordinary standard, the general exemption in their favour was very manifest.

As conclusions of such manifest importance to the practical arrangement of reliefs should be founded on the most extensive data which can be obtained, we have investigated the Returns forwarded to the War Office from every corps which has served in the West Indies for the last 20 years, and given a condensed statement of the strength and deaths in each month in Abstract No. XXIX. of Appendix, from which the following Tables have been framed, showing what proportion of the strength died during each successive year of service there. This has been done on the principle, that if troops recently arrived in that country suffered in a much greater proportion than those who have been some time resident, it must follow as a necessary consequence, when the mortality is thus arranged, that a progressive diminution will appear in each successive year as the period of service is prolonged, and that during the first year particularly, the loss sustained by each corps will greatly exceed the usual average, whereas the reverse appears to be the fact by the following Table :—

Table LXXV.—Showing the Strength of, and Deaths in, each Corps during its Period of

Year of Service		1st Foot, 1st Bat., Arrived Feb. 1826.	2d Foot Arrived June 1816.	4th Foot, Arrived April 1819.	5th Foot, Arrived April 1819.	9th Foot, Arrived April 1819.	14th Foot, Arrived Feb. 1836.	19th Foot, Arrived Dec. 1826.	21st Foot, Arrived April 1819.	25th Foot, Arrived Feb. 1826.	27th Foot, Arrived Jan. 1824.	35th Foot, Arrived Jan. 1821.	36th Foot, Arrived Nov. 1830.
1st Year.	Strength .	507	707	675	708	680	477	504	670	546	529	577	490
	Deaths...	9	108	53	10	23	80	108	21	21	78	29	17
	Station ..	Barbadoes	Barbadoes	Grenada	Antigua	{ St. Vincent's } Barbadoes 1 month. St. Kitt's 11 months.		Demerara	Barbadoes	Barbadoes	Demerara	Antigua	Barbadoes
2d.	Strength .	532	642	610	701	653	..	429	643	511	489	643	473
	Deaths...	18	175	91	54	37	..	20	78	15	47	26	53
	Station ..	{ Barbadoes 10 m. Trinidad 2 m. }	{ Barbadoes 1 m. St. Vincent 11 m. }	{ Grenada 11 m. Barbadoes 1 m. }	{ Antigua 11 m. St. Vincent 1 m. }	{ St. Vincent 11 m. Grenada 1 m. }	..	{ Demerara 1 m. Barbadoes 11 m. }	{ Barbadoes 1 m. }	{ Barbadoes 11 m. Demerara 1 m. }	{ Demerara 1 m. }	Antigua	Barbadoes
3d.	Strength .	484	551	603	555	588	..	558	554	485	453	616	476
	Deaths...	60	28	32	110	52	..	9	110	109	52	27	27
	Station ..	Trinidad	{ St. Vincent 11 m. Demerara 1 m. }	{ Barbadoes 1 m. }	St. Vincent	Grenada	..	Barbadoes	Demerara	{ Demerara 11 m. St. Vincent 1 m. }	{ Demerara 11 m. }	Antigua	{ Barbadoes 2 m. Antigua 10 m. }
4th.	Strength .	518	588	585	524	581	..	567	555	458	471	567	530
	Deaths...	27	86	10	68	40	..	13	35	31	37	27	28
	Station ..	Trinidad	Demerara	Barbadoes	St. Vincent	Grenada	..	{ Barbadoes 1 m. Grenada 11 m. }	{ Demerara 1 m. }	Demerara	St. Vincent	Barbadoes	Antigua
5th.	Strength .	520	495	558	576	554	..	547	522	509	524	512	496
	Deaths...	42	88	19	49	14	..	14	47	32	37	28	37
	Station ..	Trinidad	{ Demerara 10 m. Barbadoes 2 m. }	{ Barbadoes 9 m. Antigua 3 m. }	{ St. Vincent 9 m. Dominica 3 m. }	{ Grenada 2 m. }	..	{ Grenada 4 m. St. Vincent 8 m. }	{ Demerara 9 m. St. Vincent 3 m. }	{ Demerara 1 m. }	St. Vincent	Barbadoes	Antigua
6th.	Strength .	503	..	536	507	517	..	517	506	441	510	445	475
	Deaths...	41	..	31	68	32	..	39	29	56	32	39	68
	Station ..	{ Trinidad 11 m. St. Lucia 1 m. }	..	Antigua	Dominica	Grenada	..	{ St. Vincent 2 m. Trinidad 10 m. }	{ St. Vincent 1 m. }	Demerara	{ St. Vincent 8 m. Grenada 4 m. }	{ Barbadoes 2 m. St. Lucia 10 m. }	St. Lucia and Dominica
7th.	Strength .	493	..	426	415	466	..	500	515	455	497	432	..
	Deaths...	38	..	24	58	40	..	32	36	29	19	77	..
	Station ..	St. Lucia	..	Antigua	Dominica	{ Grenada 2 m. Trinidad 10 m. }	..	Trinidad	St. Vincent	Demerara	Barbadoes	St. Lucia	..
8th.	Strength .	512	..	..	..	272*	..	500	..	508	..	494	..
	Deaths...	55	..	..	..	32	..	27	..	19	..	27	..
	Station...	St. Lucia	..	..	..	{ Trinidad 8 m. }	..	Trinidad	..	Demerara	..	St. Lucia	..
9th.	Strength .	521	..	..	..	..	..	470	..	525	..	483	..
	Deaths...	19	..	..	..	..	..	25	..	20	..	59	..
	Station ..	{ St. Lucia 1 m. Barbadoes 11 m. }	..	..	..	..	..	Trinidad	..	{ Demerara 11 m. Barbadoes 1 m. }	..	St. Lucia	..
10th.	Strength .	..	..	..	..	..	..	292*	..	483	..	472	..
	Deaths...	..	..	..	..	..	..	18	..	22	..	43	..
	Station ..	..	..	..	..	..	..	{ Trinidad 6 m. Barbadoes 2 m. }	..	Barbadoes	..	{ St. Lucia 2 m. Barbadoes 10 m. }	..
11th.	Strength .	..	..	..	..	..	..	..	..	..	..	397	..
	Deaths...	..	..	..	..	..	..	..	..	..	..	38	..
	Station...	..	..	..	..	..	..	..	..	..	..	Barbadoes	..

\* The last year's service of the 9th Foot embraced eight months only; the real strength during that time was 408; but in order to make the period the last year's service of the 19th Foot was for eight months only, and was similarly arranged.

Note.—The annual deaths in this and the following Tables will be found not to correspond exactly with those stated in the Abstract of Ages from

Service in the Windward and Leeward Command, with the Ratios of Mortality subjoined.

68th Foot, 2d Bat., Arrived Oct. 1824.	60th Foot, 4th Bat., Arrived May 1808.	63d Foot, Arrived May 1808.	65th Foot, Arrived Dec. 1829.	67th Foot, Arrived Mar. 1833.	69th Foot, Arrived Dec. 1831.	74th Foot, Arrived Nov. 1834.	76th Foot, Arrived Mar. 1834.	86th Foot, Arrived Nov. 1826.	89th Foot, Arrived Dec. 1835.	93d Foot, Arrived Dec. 1823.	Royal York Rangers, Arrived May 1808.	R.W. India Rangers, Arrived in 1807 & 1808.	Total of all Corps.
543 57	.. ..	.. ..	541 55	494 24	522 20	502 13	528 64	514 34	489 60	495 16	.. ..	.. ..	11,678 900
Berbice	..	..	Berbice	Barba- does	Barbadoes 2 m. St. Vincent 10 m.	Barbadoes 1 m. Grenada 11 m.	St. Lucia	Trinidad	Trinidad and Tobago	Barbadoes	..	..	..
507 59	.. ..	.. ..	489 58	513 29	534 15	510 25	468 54	503 25	.. ..	498 18	.. ..	.. ..	10,328 897
Berbice	..	..	Berbice	Barbadoes 3 m. St. Kitt's 9 m.	St. Vincent	Antigua	St. Lucia 8 m. Grenada 4 m.	Trinidad 2 m. Barbadoes 10 m.	..	Barba- does	..	..	..
429 52	.. ..	.. ..	465 16	481 37	547 13	.. ..	483 44	510 29	.. ..	487 19	.. ..	.. ..	9,325 826
Berbice	..	..	Berbice	St. Kitt's	St. Vincent	..	Barbadoes	Barba- does	..	Barbadoes 3 m. Antigua 9 m.	..	..	..
358 13	.. ..	.. ..	502 26	474 33	511 35	.. ..	.. ..	528 26	.. ..	480 20	.. ..	.. ..	8,797 555
Berbice	..	..	Berbice 2 m. Barbadoes 10 m.	St. Kitt's 3 m. Guiana 9 m.	St. Vincent 1 m. Demerara 11 m.	..	..	Barbadoes 3 m. Antigua 9 m.	..	Antigua	..	..	..
330 14	.. ..	.. ..	513 12	..	496 17	.. ..	.. ..	508 23	.. ..	500 21	.. ..	.. ..	8,160 494
Berbice	..	..	Barbadoes	..	Demerara or Berbice	..	..	Antigua	..	Antigua	..	..	..
..	..	..	487 17	..	..	..	..	493 26	.. ..	493 32	.. ..	.. ..	6,430 510
..	..	..	Barbadoes 1 m. St. Vincent 11 m.	..	..	..	..	Antigua	..	Antigua	..	..	..
..	..	..	525 24	..	..	..	..	509 41	.. ..	480 57	.. ..	.. ..	5,713 475
..	..	..	Grenada and St. Vincent	..	..	..	..	Antigua 3 m. Berbice 9 m.	..	Antigua 3 m. St. Lucia 9 m.	..	..	..
..	..	..	..	..	..	..	..	515 37	.. ..	461 39	.. ..	.. ..	3,252 236
..	..	..	..	..	..	..	..	Demerara	..	St. Lucia	..	..	..
..	813 69	857 90	..	..	..	..	..	472 33	.. ..	444 55	1,061 237	900 179	6,546 786
..	Demerara	St. Kitt's	..	..	..	..	..	Demerara	..	St. Lucia 1 m. Barbadoes 11 m.	Trinidad	St. Lucia	..
..	808 35	769 41	..	..	..	..	..	481 16	.. ..	434 18	849 205	864 195	5,452 593
..	Demerara	St. Kitt's 2 m. Barbadoes 10 m.	..	..	..	..	..	Demerara 6 m. Barbadoes 6 m.	..	Barba- does	Trinidad	St. Lucia 3 m. Antigua 9 m.	..
..	635 32	673 39	..	..	..	..	..	..	..	..	654 221	765 107	3,124 497
..	Demerara	Barbadoes	..	..	..	..	..	..	..	..	Trinidad	Antigua	..

correspond with that of the others, the strength has been stated at 272 for the whole year, which is equal to 408 for eight months. In the same manner 1830 to 1835, because they are made up for different periods.

The following exhibits these Results in Ratios per Thousand of the Mean Strength:—

Years.	1st battalion, 1st Foot.	2d Foot.	4th Foot.	5th Foot.	9th Foot.	19th Foot.	21st Foot.	25th Foot.	27th Foot.	35th Foot.	36th Foot.	2d battalion, 60th Foot.	4th battalion, 60th Foot.	63d Foot.	65th Foot.	67th Foot.	69th Foot.	74th Foot.	76th Foot.	86th Foot.	93d Foot.	Royal York Rangers.	Royal West India Rangers.	89th Foot.	14th Foot.	General ratio on average of all the Corps.
1st ..	18	153	79	14	35	214	31	39	148	50	35	105	..	..	102	49	38	26	121	66	32	..	..	123	168	77
2d ..	34	273	149	77	57	47	121	29	96	41	112	116	..	..	124	57	28	49	115	50	36	..	..	..	..	87
3d ..	124	51	53	198	89	16	199	225	115	44	57	121	..	..	34	77	24	..	91	57	39	..	..	..	..	89
4th ..	52	146	17	130	69	23	63	68	79	48	53	36	..	..	52	70	69	..	..	49	42	..	..	..	..	63
5th ..	81	178	34	85	25	26	90	63	71	55	75	42	..	..	23	..	34	..	..	45	42	..	..	..	..	61
6th ..	82	..	58	134	62	76	67	127	63	89	143	..	..	..	35	..	..	..	..	53	65	..	..	..	..	79
7th ..	77	..	56	140	86	64	70	64	38	178	..	..	..	..	46	..	..	..	..	81	119	..	..	..	..	83
8th ..	108	..	..	..	118	54	..	37	..	56	..	..	..	..	..	..	..	..	..	72	85	..	..	..	..	73
9th ..	37	..	..	..	..	53	..	38	..	122	..	..	..	85	105	..	..	..	..	70	124	223	199	..	..	120
10th ..	..	..	..	..	..	62	..	46	..	91	..	..	..	43	53	..	..	..	..	33	41	241	226	..	..	109
11th ..	..	..	..	..	..	..	..	..	..	96	..	..	50	58	..	..	..	..	..	..	..	338	140	..	..	140
General Average . . .																										85

\* The mortality of previous years in the 4th battalion, 60th, 63d Foot, Royal York Rangers, and Royal West India Rangers, is not stated, because this would have extended the investigation beyond 1816, at which period these corps formed the whole force of white troops in the Command, and were then in their ninth year of service there.

Those who advocate the doctrine of acclimatization will be surprised to find from this Table, that for nine instances in which the mortality during the first year has been above the average, there are twelve in which it has been below it; that the mortality has increased with length of residence in at least as many instances as it has diminished, and that on the average of the whole, the last years appear even more fatal than the first. This requires no comment; the figures establish the facts, and will, we trust, be sufficient to set the question at rest, at least so far as the Windward and Leeward Command is concerned.

In this Abstract we have noted where the head-quarters of each corps were stationed; but it must be kept in view, that as the islands vary in salubrity, and the corps are often broken up into detachments, and we have not the means of tracing the interchange of parties between the head-quarters and out-stations, no satisfactory deductions can be drawn from this document as to the relative advantages of keeping a corps during its service in the West Indies in one island, or of changing its station frequently, as is done at present, a point which it is of very great importance to have accurately ascertained.

We shall next investigate, on the same principles, the mortality of corps serving in Jamaica during the last 20 years. For this purpose the following Table is subjoined, framed from the War Office Monthly Returns, extracts of which will be found in the Abstract No. XXX. of Appendix.

Table LXXVI.—Showing the Strength of, and Deaths in, each Corps during its period of Service in Jamaica, with the Ratios of Mortality subjoined.

Year of Service		8th Foot arrived August, 1833.	22d Foot arrived December, 1826.	33d Foot arrived February, 1822.	37th Foot arrived November, 1832.	50th Foot arrived March, 1819.	56th Foot arrived February, 1832.	58th Foot arrived December, 1816.	61st Foot arrived December, 1816.	64th Foot arrived April, 1834.	77th Foot arrived April, 1824.	84th Foot arrived February, 1827.	91st Foot arrived February, 1822.	92d Foot arrived June, 1819.	York Chasseurs arrived September, 1816.	Total of all Corps.
1st.	Strength	493	494	536	466	541	517	718	702	513	546	445	482	452	847	7,772
	Deaths	79	157	78	65	266	53	58	56	51	105	180	168	285	175	1,776
2d.	Strength	438	366	556	476	445	500	662	655	454	383	441	449	489	638	7,172
	Deaths	82	48	18	31	53	53	80	58	49	166	36	49	35	102	860
3d.	Strength	437	521	533	471	603	473	621	664	..	385	509	449	582	..	6,248
	Deaths	25	21	34	22	108	40	124	110	..	24	34	54	86	..	682
4th.	Strength	..	531	453	487	545	453	575	552	..	494	524	459	597	..	5,670
	Deaths	..	54	129	31	94	33	98	61	..	67	62	157	41	..	827
5th.	Strength	..	470	337	..	560	463	544	631	..	447	434	351	557	..	4,794
	Deaths	..	72	36	..	33	42	124*	29†	..	41	90	25	40	..	532
6th.	Strength	..	390	426	..	549	..	..	..	..	496	430	471	513	..	3,275
	Deaths	..	49	115	..	50	..	..	..	..	24	79	75	56	..	448
7th.	Strength	..	449	426	..	451	..	..	..	..	538	475	443	414	..	3,196
	Deaths	..	42	16	..	118	..	..	..	..	26	48	31	118	..	399
8th.	Strength	..	496	525	..	..	..	..	..	..	468	503	504	..	..	2,496
	Deaths	..	51	36	..	..	..	..	..	..	82	21	18	..	..	208
9th.	Strength	..	442	504	..	..	..	..	..	..	405	500	516	..	..	2,367
	Deaths	..	30	52	..	..	..	..	..	..	21	16	31	..	..	150
10th.	Strength	..	490	435	..	..	..	..	..	..	484	475	..	..	..	1,884
	Death	..	18	48	..	..	..	..	..	..	72	41	..	..	..	179

\* 29 died in the 58th during the next three months, but could not be included, as the year was not complete.  
† 35 died in the 61st during the next four months, but could not be included, for the same reason.

The following exhibits these Results in Ratios per Thousand of the Strength :—

Year of Service	8th Foot.	22d Foot.	33d Foot.	37th Foot.	50th Foot.	56th Foot.	58th Foot.	61st Foot.	64th Foot.	77th Foot.	84th Foot.	91st Foot.	92d Foot.	York Chasseurs.	Average of all Corps.
1st.	160	324	145	134	492	102	81	80	99	192	404	349	630	207	228
2d.	187	124	32	65	119	106	121	89	108	433	82	109	72	122	120
3d.	57	40	64	47	179	85	200	166	..	62	67	120	148	..	109
4th.	..	102	285	64	172	73	170	111	..	136	118	342	69	..	146
5th.	..	153	107	..	59	91	228	46	..	92	207	71	72	..	111
6th.	..	126	270	..	91	..	..	..	..	48	184	159	109	..	137
7th.	..	94	38	..	262	..	..	..	..	48	101	70	285	..	125
8th.	..	103	69	..	..	..	..	..	..	175	42	36	..	..	83
9th.	..	68	103	..	..	..	..	..	..	52	32	60	..	..	63
10th.	..	37	110	..	..	..	..	..	..	149	87	..	..	..	95
General average of all years															135

These documents appear at first sight to support the truth of the doctrine of acclimatization, as the mortality during the first year of service in this Command has proved, on the general average of all the corps, nearly double that of any subsequent one. On more minute investigation, however, we find, that upon three several occasions, shortly after the reliefs for two regiments arrived in the island, viz., in 1819, 1822, and 1827, the epidemic or yellow fever broke out, and extended its ravages over all classes. It consequently becomes necessary before drawing any conclusions, to inquire whether this extraordinary degree of mortality during the first year of service arose from this adventitious circumstance, or was solely the result of that want of acclimatization to which some have been disposed to attribute it.

To ascertain this important point it is only necessary to confine our inquiries to the nine years from 1828 to 1836 inclusive, during which there was no serious epidemic in the island. Four new corps arrived during that period, and there were five which had been for some time on the station. The results in regard to the mortality among these corps in each successive year of service during that period have therefore been made up separately in the following Tables :—

Year of Service		8th Foot.	22d Foot.	33d Foot.	37th Foot.	56th Foot.	64th Foot.	77th Foot.	84th Foot.	91st Foot.	Total of all Corps.
1st.	Strength	493	..	..	486	517	513	..	..	..	2,009
	Deaths	79	..	..	65	53	51	..	..	..	248
2d.	Strength	438	386	..	476	500	454	..	441	..	2,695
	Deaths	82	48	..	31	53	49	..	36	..	299
3d.	Strength	437	521	..	471	473	..	..	509	..	2,411
	Deaths	25	21	..	22	40	..	..	34	..	142
4th.	Strength	..	531	..	487	453	..	..	524	..	1,995
	Deaths	..	54	..	31	33	..	..	62	..	180
5th.	Strength	..	470	..	..	463	..	447	434	..	1,814
	Deaths	..	72	..	..	42	..	41	90	..	245
6th.	Strength	..	390	..	..	..	..	496	430	..	1,316
	Deaths	..	49	..	..	..	..	24	79	..	152
7th.	Strength	..	449	426	..	..	..	538	475	443	2,331
	Deaths	..	42	16	..	..	..	26	48	31	163
8th.	Strength	..	496	525	..	..	..	468	503	504	2,496
	Deaths	..	51	36	..	..	..	82	21	18	208
9th.	Strength	..	442	504	..	..	..	405	500	516	2,367
	Deaths	..	30	52	..	..	..	21	16	81	150
10th.	Strength	..	490	435	..	..	..	484	475	..	1,884
	Deaths	..	18	48	..	..	..	72	41	..	179

Table LXXVII.  
Showing the  
Strength and  
Deaths in each  
Corps serving in  
Jamaica from 1828  
to 1836 only, with  
Ratios of Mortality  
subjoined.

Influence of length  
of Residence.

The following exhibits these Results in Ratios per Thousand of the Mean Strength :—

	8th Foot.	22d Foot.	33d Foot.	37th Foot.	56th Foot.	64th Foot.	77th Foot.	84th Foot.	91st Foot.	Total of all Corps.
1st Year . .	160	..	..	134	102	99	..	..	..	123
2d ,, . .	187	124	..	65	106	108	..	82	..	111
3d ,, . .	57	40	..	47	85	..	..	67	..	59
4th ,, . .	..	102	..	64	73	..	..	118	..	90
5th ,, . .	..	153	..	..	91	..	92	207	..	135
6th ,, . .	..	126	..	..	..	..	48	184	..	116
7th ,, . .	..	94	38	..	..	..	48	101	70	70
8th ,, . .	..	103	69	..	..	..	175	43	36	83
9th ,, . .	..	68	103	..	..	..	52	32	60	63
10th ,, . .	..	37	110	..	..	..	149	87	..	95
General Average of 9 Years . .										93

These documents clearly prove that the great mortality which formerly appeared in the first year of service, arose not so much from the supposed want of acclimatization, as from the casual circumstance of the epidemic fever prevailing to a great extent in the years when six of the corps arrived; but that if a period of ordinary mortality be taken, as in the last Table, the fifth and sixth years of residence are still more fatal than the first and second.

That the great mortality among the six corps shortly after their arrival involves no general principle sufficient to establish any decided advantage from length of residence, is not less apparent from the preceding Table, than from the following minute details of the circumstances under which it occurred.

There can be no doubt, from the mortality experienced by several of the other corps in this island, that 1819 was a very unhealthy year, and it unfortunately happened that in March and June the 50th and 92nd arrived, and were immediately sent to Up-Park Camp, one of the most unhealthy of the military stations. In July and August fever began to manifest itself to an alarming extent in both corps, and within a year of their arrival 285 had fallen victims to it in the 92nd regiment, out of a strength of 452; and 266 out of a strength of 541 in the 50th, making a mortality of about 63 per cent. in the former corps, and 49 per cent. in the latter.

This was immediately attributed to want of acclimatization, without adverting to the fact, that troops several years in the island suffered at other unhealthy stations in nearly a corresponding degree. For instance, out of 136 belonging to the 61st regiment and York Chasseurs stationed at Port Antonio, there died 45 in the course of 1819, and out of 57 of the same corps stationed at Savannah-la-Mar 13 died. During the latter months of the previous year too, the 58th regiment, out of 217 men stationed at Spanish Town, lost not fewer than 54, so that it is probable, had the whole of these acclimatized corps being exposed at the same stations, the mortality would have been little short of what took place in the 50th and 92nd. The loss sustained by these last mentioned corps was far, however, from ensuring them any immunity from mortality in after years; for in 1825, *six years after their arrival*, they were again attacked by the prevailing epidemic, and lost, the former 118 out of a strength of 451, and the latter 118 out of a strength of 414.

The next arrivals in this island were the 33rd and 91st regiments, which, notwithstanding the fate of their predecessors, were sent to Up-Park Camp immediately on landing in February 1822. Considerable sickness prevailed at that period even among corps long resident in the island, as we find that in January the 50th lost 29 and the 92nd 16 men, and in February the 61st lost 17. It may be easily supposed that a knowledge of this circumstance, combined with the unhealthy character of the station to which they had been sent, created no small alarm to these newly arrived troops. Fever soon manifested itself among them. Mortality made rapid progress, and had it not been for the timely precaution of their removal to another station, the deaths would probably have been as numerous as among the 50th and 92nd in 1819. No sooner, however, did their removal take place than the mortality rapidly diminished, a pretty plain proof that in this as well as in the previous epidemic it was attributable more to the unhealthiness of the station, than to the want of acclimatization.

Even though they were thus unfortunate on their arrival, the total deaths in these unacclimatized corps in their first year of service were not greater than what occurred in some detachments of other corps long resident in the island; for in that year the 50th lost 83 out of 305 stationed at Spanish Town, and 21 out of 68 stationed during five months at Savannah-la-Mar. The 92nd was more fortunate; but then it was occupying Maroon Town, Falmouth, and some of the healthiest stations in the island.

While the 33rd escaped with a partial loss in 1822, we find that during the epidemic of 1825, when it had been *three* years in the country, the mortality was 123 in a strength of 453, and during the epidemic of 1827, 115 out of 426; thus at each of these periods the mortality was double that of the first year. Nor does the 91st regiment appear to have derived much benefit from long residence, for in 1825, three years after its arrival, it lost 157 out of 459, and also suffered considerably by the epidemic of 1827.

The next corps which arrived was the 77th, in April 1824. The head quarters were sent to Stoney Hill, and two companies to Port Antonio. Till March of the following year its loss was only about 10 per cent., but in that month a dreadful epidemic fever broke out and

cut off upwards of 200. This mortality, however, was by no means confined to that corps. Every other in the island, though long resident, suffered in nearly a corresponding degree, as will be seen by a reference to the preceding Table.

The last corps to which we find it necessary to advert are the 22nd and 84th, which arrived in Jamaica in the months of January and February 1827; the former was quartered at Stoney Hill, the latter at Fort Augusta, Port-Royal, and Kingston. Notwithstanding the excesses to which troops are prone on their arrival, they enjoyed unprecedented good health for the first six months, the 22nd losing only five men, and the 84th one during that period; but in the month of August fever manifested itself and swelled the deaths to 157 in the former corps, and 180 in the latter, within the first year after their arrival. This mortality, however, was not confined to these alone; for the 33rd, which had been six years in the island, also suffered very severely, losing 115 men out of a strength of 426.

Combining then all the information we have been able to collect on the subject in regard to both the West India Commands we are led to the following conclusions:—

1. That troops are likely to gain but little immunity from either disease or mortality by a prolonged residence in the West Indies. This is established by several instances of corps which have suffered to as great an extent during the latter years of their residence as during the earlier, particularly the 1st, 5th, 9th, 25th, 35th, 67th, 69th, 86th, and 93rd, in the Windward and Leeward Command, as well as the 33rd, 58th, 61st, and 91st, in the Jamaica Command.

2. That soldiers are not in general liable to any greater mortality during their first year of service there than at any subsequent period. This is shown, not only by the instances referred to in the first part of this section, but also by the experience of 12 corps out of 21 in the Windward and Leeward Command, and that of the 56th, 58th, 61st, and 64th regiments in Jamaica, in all of which the mortality during the first year of residence was under the general average of the island.

3. That when the circumstances attending the mortality in several of the corps during their first year of residence in Jamaica are minutely investigated, the facts apparently at variance with the above conclusions are sufficiently explained by the occurrence of four epidemics between 1819, and 1827, so that no corps could arrive without encountering their fatal effects within the first year or two of its residence there.

4. That though in years of ordinary mortality corps long resident in the island suffer as much or even more than those recently arrived, yet during the ravages of epidemics there appears a partial exemption in favour of the former.

This peculiarity may however be easily accounted for without attributing it to so indefinite a cause, or one so little supported by numerical results as the supposed influence of acclimatization. All the medical reports concur in stating how much the susceptibility to fever is increased by fear and despondency, and these passions we may easily conceive operate much more powerfully upon the minds of men newly arrived in the country than upon those who have perhaps encountered and survived similar epidemics before. We may easily fancy what must be the feelings of a recruit, when he sees a fourth part of his comrades swept off in the space of a month, as was the case in some corps soon after their arrival. We can suppose the apprehension with which he will contemplate the probability of a similar fate, and how little expectation he will entertain of being among the fortunate survivors. He is thus not only rendered more susceptible of the influence of disease, but goes into hospital with scarce a hope of recovery; whereas the soldier who has been longer accustomed to the mortality of that country possesses not merely the advantage of being less apprehensive and consequently less susceptible, but even if seized with fever will keep up his spirits, and contend against the violence of an attack under which the other would sink.

We may mention as a remarkable instance of the influence of fear in inducing this disease, as well as of hope in repelling it, that during the epidemic at Up-Park Camp among the 91st regiment in 1822, when the order was issued for their removal to another station, the fever ceased, and *though the corps was unexpectedly detained for three or four days after the order was issued, not one case was admitted into hospital in the whole course of that period.*

The origin of the prevailing idea in regard to the advantages of acclimatization, which is so opposed to numerical results, may very probably be traced to the fact that persons long accustomed to the mortality of any station which is particularly insalubrious, seem to become in a great measure unconscious of its extent as compared with what takes place in a healthier climate. We consequently find in Jamaica that if the deaths are a little under 13 per cent., those corps which have been long resident in the island, and accustomed to a higher ratio of mortality, congratulate themselves on having enjoyed what they deem a healthy season. With corps newly arrived from Europe, however, this is not the case; they have been accustomed to a mortality of about 1½ per cent., and when they find it increased tenfold, a stronger impression of the deadly nature of the climate is produced, than perhaps double the mortality would occasion in any subsequent year. The soldier, by remaining in the climate, if he become not more seasoned to it, is certainly more unconscious of its fatal effects, and views it with less apprehension, precisely as the veteran regards with coolness and apathy the dangers of the battle-field which create a vivid and perhaps lasting impression on the mind of the recruit.

These circumstances act not less forcibly on the mind of the officer than of the soldier, and from the want of any information as to the ratio of mortality which has prevailed in other corps at the same stations, even the most intelligent may be led to suppose, that the loss they are sustaining is attributable to their recent arrival, not to the usual high mortality incident to the station. By the circulation of this Report throughout the army, an opportunity will be afforded to officers commanding corps, as well as those in medical charge, of generalizing



their ideas on these points, and of ascertaining, by a comparison of the annual mortality of their corps with that which has previously occurred among other troops at the same station, whether they have really been more unfortunate in this respect than those who preceded them.

The official results in regard to the mortality at each age among the military officers and civil servants of the Bengal Presidency, stated in page 86, afford a convincing proof that in the East Indies also no advantage has hitherto been derived from length of residence. As these individuals are never employed out of India, and generally arrive there about the age of 18 or 20, their respective ages and ranks may be assumed as a criterion for estimating their length of residence in that country. On that principle, then, we find, taking equal numbers of each rank, that the mortality among the Ensigns, for the most part youths but recently arrived, is only 23; while that of the Lieutenants, who must have been at least three years longer resident to have attained that rank, is 27; and that of the Captains, who must have been about 12 or 13 years longer, is 34 per thousand, and so on in a corresponding proportion with the higher grades.

In case it should be objected that this does not exhibit the precise operation of mortality during the first year or two of residence in that country, when the influence of acclimatization is supposed to be most strongly manifested, the following information in regard to the civil servants in the Bengal Presidency will supply that defect:—

	Numbers Alive.	Deaths in First Year.	Ratio of Deaths per Thousand of Living.
1st Year of Residence . . . . .	975	19	19·5
2d ditto . . . . .	933	22	23·5
3d ditto . . . . .	906	18	20·
4th ditto . . . . .	874	19	22·

Here, then, we have traced the same individuals through four successive years of residence, with the liability to mortality constantly augmenting; and unless we are to suppose that a different law regulates the mortality among Europeans in the tropical climates of the eastern and western hemisphere, we are inevitably led to the same conclusions which we have already demonstrated from the previous numerical results.

It must be kept in mind, however, that the present observations as to the influence of acclimatization refer to the mortality only. We draw no conclusions as to whether the extent of sickness is, or is not, greater among troops newly arrived than among those who have been long resident, because we possess no numerical details on which to found them. It militates, however, very strongly against the former supposition, that in 1831, when no corps or recruits arrived in Jamaica, the admissions from fever alone were 2276, whereas the strength was only 2232. Consequently, on the average, each of these men, *though acclimatized*, must have been treated for fever at least once in the course of the year, which is greatly above the usual ratio even when a large proportion of recruits have joined; and if we take the previous year, 1830, when no corps and only 241 recruits arrived, we find the cases of fever alone to have been 2462 out of a strength of 2842; consequently, on the average, each man must have had an attack once in 13 months. What benefit then is to be expected from length of residence if the susceptibility to fever remains undiminished, as in these instances is clearly proved to have been the case?

It is unnecessary to extend the same train of reasoning to diseases of the bowels, lungs, and liver, which form so considerable a portion of the admissions; because so far are these from ever being benefited by acclimatization that change of residence is generally recommended as a probable means of inducing recovery.

It will be observed that we have treated this question entirely in a numerical, not a medical point of view, because there is little use in discussing alleged reasons why men should be most liable to sickness and mortality on their arrival in tropical climates than those who have been longer resident, till we have first ascertained that they really are so. This we have shown is not only far from being the case, but that the doctrine in itself appears to involve the impossibility that a soldier who must have suffered for a series of years under the most insidious and fatal diseases to which the human frame is subject, is better fitted to contend against such maladies in future than he who brings with him to that climate the full health and vigour of an unimpaired European constitution.

SECTION V.

*On the Mortality and Diseases of the Officers serving in the West Indies.*

THOUGH it may perhaps be impossible to trace directly the causes to which the high ratio of sickness and mortality among troops in the West Indies is principally to be attributed, yet a comparison of the relative influence of each of the principal classes of diseases among the different ranks of which these troops are composed, is one of the most likely means of ascertaining how far those causes admit of amelioration; for instance, were we to find officers subject to nearly the same degree of sickness and mortality as the general mass of the troops, we should be led to infer that no improvement either in the comfort, diet, or accommodation of the soldier, would be likely to effect any material improvement in his health, whereas a contrary result would induce a hope, that, by this means, much might be done towards the attainment of that important object.

To determine this point we have subjoined in the Appendix two Abstracts, Nos. XXXI. and XXXII., showing the diseases treated and deaths among the officers serving in the Windward and Leeward Command from 1818, and in Jamaica, from 1819 to 1836\* inclusive, compiled from the Returns furnished by the principal medical officers. Before drawing any deductions from these, however, it is necessary we should know the number of officers who have been serving in each of these Commands; and in this there is considerable difficulty, because sometimes the Medical Returns do not supply that information at all, and at others, the Commissariat and Staff, who constitute nearly a fourth of the officers, are included, though the numbers treated and deaths among them are not. To escape the error in which we might be involved by assuming as our basis a strength made up on different principles in different years, we have taken the number of officers serving in each Command, as stated by the Adjutant General in the Report of the Committee on Military Expenditure, which includes the regimental ranks only; and by thus estimating the numbers exposed to the climate at the lowest amount, and retaining the whole diseases and deaths as stated in the Medical Returns, we are at least certain of not underrating the extent of sickness and mortality among this class in bringing it into comparison with what prevails among the general mass of the troops.

*West Indies.*  
Mortality, &c. of  
Officers.

Years.	WINDWARD AND LEEWARD COMMAND.			JAMAICA COMMAND.		
	Strength per Adjutant General's Returns.	Per Medical Returns.		Strength per Adjutant General's Returns.	Per Medical Returns.	
		Treated.	Died.		Treated.	Died.
1818	232	228	10	..	..	..
1819	215	152	10	107	113	30
1820	172	160	20	88	43	4
1821	184	186	18	117	74	8
1822	159	102	6	91	88	13
1823	168	105	3	94	77	7
1824	208	155	8	90	41	5
1825	182	107	6	105	88	29
1826	209	121	7	80	39	1
1827	203	202	18	86	99	19
1828	197	225	7	101	32	7
1829	205	123	7	101	45	5
1830	210	167	3	121	67	5
1831	184	185	8	98	76	9
1832	183	157	7	77	46	1
1833	189	177	3	126	83	3
1834	196	116	6	164	77	6
1835	224	236	7	160	85	6
1836	220	305	3	160	81	6
Total	3,740	3,159	157†	1,966	1,254	164
Ratio per thousand of mean strength . . }		845	42·	..	637	83·4

Table LXXVIII.  
Showing the Num-  
bers treated and  
Deaths among the  
Officers serving in  
the Windward and  
Leeward Command,  
and in Jamaica.

Thus it appears that in the Windward and Leeward Command, the average number of officers annually under treatment has amounted to 845 per thousand, and the deaths to 42 per thousand of the strength; while in Jamaica the former has amounted to 637 per thousand, and the latter to 83·4 per thousand of the strength.

\* The returns of sick officers for 1817 and 1818 in Jamaica, and for 1817 in the Windward and Leeward Command, cannot be procured, consequently, these observations do not extend over exactly the same period as those of the Troops.

† The deaths in the Windward and Leeward Command are exclusive of about 30 which took place among officers and clerks belonging to the Commissariat and Ordnance Staff, and have been kept distinct from those of the regimental grades wherever it was practicable to do so. They are also exclusive of 10, which occurred from accident, suicide, and other causes, not connected with climate.

Mortality, &c. of  
Officers.

On comparing these results with the admissions and deaths among the Troops generally, we find that in both Commands the proportion is only about half as high among the officers. It may be urged, however, that the mortality among that rank is likely to have been materially reduced by the facility with which they can return home, and quit the service by sale or retirement on half-pay, after which their death cannot readily be traced, though perhaps ultimately occurring from disease contracted in the West Indies. In some climates this may operate to a considerable extent, but it does not appear to do so in the West Indies, where, as fever is the principal source of mortality, and lingering diseases comparatively rare, but few have time to avail themselves of that privilege. In the course of 5 years from 1830 to 1835, we have not been able to trace more than three or four who died after leaving the West Indies in bad health, and that number would not materially affect our results, especially considering that we have made ample allowance for it by taking the strength on a much more limited scale than it ought to have been.

In order to show the diseases from which the officers enjoy a greater exemption than the general mass of the troops, there is subjoined in the Abstracts before referred to, a detailed statement of every disease which has come under treatment, or by which a death has been occasioned among them. These have been arranged in classes in the following Table, in order to exhibit the results in a more comprehensive form :—

Table LXXIX.  
Showing the principal Diseases among the Officers serving in the West Indies.

	WINDWARD AND LEEWARD COMMAND.				JAMAICA COMMAND.			
	Treated.		Died.		Treated.		Died.	
	Total of whole Force of Officers in 19 Years.	Annual Ratio per 1000 of Mean Strength.	Total of whole Force of Officers in 19 Years.	Annual Ratio per 1000 of Mean Strength.	Total of whole Force of Officers in 18 Years.	Annual Ratio per 1000 of Mean Strength.	Total of whole Force of Officers in 18 Years.	Annual Ratio per 1000 of Mean Strength.
By Fevers . . . . .	1,340	358	108	29	760	386	136	69.2
Eruptive Fevers . . . . .	1	..	..	..	2	1	..	..
Diseases of the Lungs . . . . .	200	53	12	3.2	69	35½	4	2
" " Liver . . . . .	152	41	13	3.5	35	18	2	1
" " Stomach and Bowels . . . . .	552	148	9	2.4	152	77	7	3.6
" " Brain . . . . .	34	9	11	2.9	10	5	7	3.6
Dropsies . . . . .	7	2	..	..	7	3½	5	2.5
Rheumatic Affections . . . . .	182	49	..	..	41	21	..	..
Venereal ditto . . . . .	130	35	..	..	33	17	..	..
Abscesses and Ulcers . . . . .	225	60	..	..	67	34	..	..
Wounds and Injuries . . . . .	171	46	3	1	38	19	2	1.5
Diseases of the Eyes . . . . .	42	11	..	..	18	9	..	..
" " Skin . . . . .	3	1	..	..	..	..	..	..
All other Diseases . . . . .	120	32	1	..	22	11	1	..
Total . . . . .	3,159	845	157	42	1,254	637	164	83.4

Having thus reduced the numbers treated and deaths by each class of diseases to the same ratio, we possess a ready means of comparing their relative influence upon the officers and troops in these two Commands as follows :—

Table LXXX.  
Comparison of the relative Mortality and prevalence of the principal classes of Diseases among the Officers and Troops generally.

	WINDWARD AND LEEWARD COMMAND.				JAMAICA COMMAND.			
	Annual Ratio of Admissions per 1000 of Mean Strength.		Annual Ratio of Deaths per 1000 of Mean Strength.		Annual Ratio of Admissions per 1000 of Mean Strength.		Annual Ratio of Deaths per 1000 of Mean Strength.	
	Officers only.	Troops generally.	Officers only.	Troops generally.	Officers only.	Troops generally.	Officers only.	Troops generally.
By Fevers . . . . .	358	717	29	36.9	386	910	69.2	101.9
Eruptive Fevers . . . . .	..	10	..	..	1	10	..	..
Diseases of the Lungs . . . . .	53	115	3.2	10.4	35½	84½	2	7.5
" " Liver . . . . .	41	22	3.5	1.8	18	10	1	1
" " Stomach & Bowels . . . . .	148	421	2.4	20.7	77	238	3.6	5.1
" " Brain . . . . .	9	28	2.9	3.7	5	14	3.6	2.6
Dropsies . . . . .	2	7	..	2.1	3½	5	2.5	1.2
All other Diseases . . . . .	234	592	1	2.9	111	550	1.5	2
Total . . . . .	845	1,908	42	78.5	637	1,812	83.4	121.3

The only diseases by which officers suffer more than privates are those of the liver. This is a very general feature throughout all foreign stations, and may perhaps be accounted for by the circumstance that in the course of an officer's military service he may have been three or four times in tropical climates with different regiments, and thereby have acquired a greater predisposition to these diseases than the soldier, who, from not changing his corps,

rarely serves more than once in such climates. Besides, diseases of this class, as well as those of the brain, in general most affect persons in the higher ranks of life.

We shall now examine the diseases by which soldiers suffer to a greater extent than the officers. In regard to fever, the difference in the mortality is not very great, the deaths of the officers being as 2 to 3 of those among the troops generally; however, they are only about half as liable to attacks of this disease, but in the Windward and Leeward Command this exemption is almost entirely confined to fevers of the intermittent and common continued type, which seldom terminate fatally, while in Jamaica, though officers are not so often attacked by remittent fever, the cases are of a more serious character. During the last 18 years 1 in 5 of them proved fatal, but among the soldiers only 1 in 8, and in the Windward and Leeward Command three-fourths died of all the officers attacked by fever of the worst type (*Febris icterodes*), whereas only three-tenths died of the soldiers attacked by the same disease.

The aggravated character which this class of diseases generally assumes among the officers is a fact often commented on in the Medical Reports, and combined with the circumstance that in most of the epidemics an equally large proportion of that rank have been cut off as of the privates, is sufficient to show that all measures short of removing the troops to localities beyond the range of yellow fever, are likely to have comparatively little influence on this source of mortality; the very marked exemption, however, enjoyed by officers from diseases of the lungs and of the bowels, leads to the inference that much may be done towards reducing the sickness and mortality by these causes.

If one class of men is found to suffer more from diseases of the bowels than another, when there appears nothing in their duty or employment to create such a difference, we are naturally led to inquire into the nature of their diet; and on ascertaining from the results of 20 years, that in the one Command, where, for five days in the week, it has consisted of salt provisions, the mortality by that class of diseases has been nine times as high as among the officers, while in the other, where but two days' salt provisions have been issued in the week, the mortality of these two ranks approximates so nearly as to be almost on a par, we are led to the conclusion that this cause is likely to have had some influence on the prevalence and fatal character of these diseases in the Windward and Leeward Command.

If it be maintained that the soldier's liability, as compared with that of the officer, arises from his own intemperance or exposure to night duty, then it may be asked why should not a similar effect be produced in Jamaica, where there is the same intemperance, and the same extent of night duty to induce it; the cause seems inexplicable, except by referring to the agency of diet, for the results are too uniform, and extended over too long a series of years, to admit of this difference being attributable merely to chance.

The comparative exemption which officers enjoy from diseases of the lungs, both in the Windward and Leeward Command, and in Jamaica, is another very marked result in the preceding table. It will be seen that the mortality by these among the officers amounts at the former station to only about one-fourth, and at the latter to only one-fifth of what occurs among the troops generally—a remarkable circumstance, when we consider how carefully recruits are selected at their enlistment; whereas officers undergo no personal examination, and many of them may therefore be supposed to enter the army with a predisposition to affections of the lungs, which unless counteracted by powerful advantages in their favour, would probably subject them to a higher ratio of mortality by these diseases, than the selected portion of the troops.

Of this class of diseases, consumption is the principal source of mortality among the troops. Now if the liability to that disease arose from the climate of the West Indies, we should expect to see it equally manifested among the officers, whereas though 614 of the troops died in the Windward and Leeward Command, and 327 in Jamaica, of consumption and hæmoptysis, which may probably be held as a modification of the same disease, there died of officers but 10 in the former Command, and 4 in the latter, from the same causes. If this remarkable difference is accounted for by supposing that officers may leave the island for change of climate, and their deaths not be reported, then we refer to the relative proportion of officers and men treated, and we find it to be in the Windward and Leeward Command as 6 to 15, and in the Jamaica Command as 4 to 15. Hence we are led to infer, that the great susceptibility of our troops to this disease in the West Indies, is not attributable to climate only, but also to some peculiarity in their condition from which officers are exempt.

As to what that peculiarity may be, we do not feel warranted in hazarding any positive assertion, but Sir James Clarke, one of the ablest authorities on pulmonary diseases, states in a recent treatise on that subject, that improper diet and impure air are the most certain exciting causes of consumption among those not hereditarily predisposed to it, and has even demonstrated by experiment that tubercular affections may be induced in animals by confinement in close humid places, and innutritious food, consequently it seems not improbable that crowded barrack-rooms and a restriction to salt diet, may, particularly in a tropical climate, produce a similar effect on the constitution of soldiers.

Some, however, may be inclined to attribute the extent of mortality by this disease, more to the soldiers' exposure on night duty, than to the influence of diet or accommodation, and though to this supposition we do not mean to offer any positive contradiction, still it is at variance with the fact, that exposure to an equal extent in the cold regions of North America produces little more than half the mortality by pectoral affections which occurs in the warm climate of the West Indies, and that in the East Indies, where the soldier has also the same degree of night exposure *with a similar temperature*, the mortality by this class of diseases is little more than a fourth of what occurs in the West. The cause cannot well be referred to intemperance, since that prevails to about an equal extent in each of these military Commands.

As, however, exposure to the night air and intemperance, are much dwelt upon in the Medical

Reports, as causes of the high ratio of sickness and mortality among the troops, the best method of estimating their influence will be to ascertain the ratio of mortality among the sergeants and corporals, who, as well as the officers, are in a great measure exempt from them.

The private soldier is only necessarily exposed to the night air when on guard or picquet, of which, at most stations, he takes his tour every third or fourth night, and every six hours stands sentry for six hours at a time. Sergeants and corporals, however, are not employed as sentries; the former, even when on guard, are not exposed to the night air, except for a few minutes at intervals, when inspecting the reliefs, or when sent out occasionally with a patrol: neither are the corporals further exposed than while going round with the reliefs, which in small stations, such as those in the West Indies, cannot keep them out long. In fact, neither of these ranks are likely to suffer more from the night air than an officer, who, if strict and zealous when on duty, is quite as much exposed to it; consequently, if this alleged source of mortality had the baneful effects generally attributed to it, the proportion of deaths among the non-commissioned officers ought to be much lower than among the privates.

Again, with regard to intemperance, we hope it may be inferred, that those who hold the rank of non-commissioned officer, are much less addicted to this vice than those under their command. It is impossible that the discipline of any corps could be maintained, were not sobriety enforced among those who are placed in authority over, and yet in immediate contact with the men, consequently drunkenness on the part of sergeants or corporals is a fault seldom pardoned, much less tolerated, and the necessary consequence of detection is their being immediately reduced to the ranks, and sober candidates for promotion appointed in their place. As these two classes then may be considered less intemperate than the general mass of the troops, a comparison of the relative mortality to which they are subject ought to give some idea how far exposure to night air or intemperance, is likely to have increased the mortality in these two Commands.

To ascertain this with accuracy, the strength and deaths of each of these ranks serving in the West Indies, with the exception of those of the Artillery and Black Corps, have been obtained for a period of five years from 1830 to 1834 inclusive, and the results are as follow:—

Years.	MORTALITY OF SERGEANTS IN WINDWARD AND LEEWARD COMMAND.				MORTALITY OF SERGEANTS IN JAMAICA COMMAND.			
	Strength of Sergeants.	Deaths of Sergeants.	Ratio of Deaths per 1000 of Sergeants.	Ratio of Deaths per 1000 of the Troops generally.	Strength of Sergeants.	Deaths of Sergeants.	Ratio of Deaths per 1000 of Sergeants.	Ratio of Deaths per 1000 of the Troops generally.
1830	241	18	75	65	148	16	91	97
1831	251	17	68	69	118	21	178	133
1832	248	18	74	64	108	7	65	111
1833	277	26	94	50	139	11	79	86
1834	278	15	54	43	180	20	111	93
	1,295	94	73	57	693	75	108	109
Years.	MORTALITY OF CORPORALS IN WINDWARD AND LEEWARD COMMAND.				MORTALITY OF CORPORALS IN JAMAICA COMMAND.			
	Strength of Corporals.	Deaths of Corporals.	Ratio of Deaths per 1000 of Corporals.	Ratio of Deaths per 1000 of the Troops generally.	Strength of Corporals.	Deaths of Corporals.	Ratio of Deaths per 1000 of Corporals.	Ratio of Deaths per 1000 of the Troops generally.
1830	190	17	90	65	121	8	66	97
1831	191	12	63	69	95	14	147	133
1832	198	12	61	64	95	10	105	111
1833	218	12	55	50	109	9	83	86
1834	217	12	55	43	135	12	89	93
	1,014	65	64	57	555	53	95	109

Thus it appears that the mortality of these ranks in the Windward and Leeward Command is considerably higher than that of the privates, and in Jamaica almost exactly the same; so that neither the non-exposure nor superior temperance of the officer can be held sufficient to account for the comparative exemption he enjoys from diseases of the lungs and of the bowels, seeing that the non-commissioned officers, a class also enjoying these advantages, are so little benefited by them.

The age of the corporals is much the same as that of the general mass of the troops, the average age of the sergeants is considerably above it, which is the only assignable cause for the higher mortality among them, so that these results afford a strong confirmation of our former deductions in regard to the proportion of deaths being lowest among young soldiers. This is also corroborated by our having ascertained that out of an average strength of 68 drummers serving in the Windward and Leeward Command, there died but 18 in 5 years, being at the rate of 52 per thousand of the strength annually; and out of an average strength of 40 serving in the Jamaica Command, there died only 11 in the same period, being at the

rate of 55 per thousand of the strength annually, both greatly under the general average among the rest of the troops.

Now as the drummers are exempt from exposure on night duty in about an equal degree with the non-commissioned officers, and similarly situated in regard to diet and accommodation, there seems no other cause to which we can attribute their exemption from the same ratio of mortality, except to the advantage they enjoy in being on the average younger men. Drummers are proverbially prone to indulge in the use of spirituous liquors, for which their higher rate of pay gives them greater facilities than privates; but in so far as the preceding investigations extend, they seem to be much less subject to mortality, consequently were we not to arrive at the conclusion that this was attributable to their being on the average younger men, we should in some measure be involved in the absurd inference, that intemperance instead of shortening life tended to prolong it.

It is to be regretted that we have not been able to obtain the ages of these grades, separately from those of the general mass of the troops, nor the particular diseases whereby the mortality among them was occasioned, which would have enabled us to give to our conclusions more the character of certainty; but we trust enough has been done to show the practical application of this branch of the inquiry for establishing how far the mortality among troops is the direct effect of climate, and therefore irremediable, or how far it results from circumstances which are capable of amelioration.

## SECTION VI.

### *Deductions from the preceding Report.*

THOUGH the minute train of investigation pursued in this Report has not enabled us to distinguish with certainty the essential causes of sickness and mortality among European troops and civil residents in the West Indies, and though perhaps these causes may remain for ever involved in obscurity, yet the numerical results at which we have arrived seem sufficient to warrant the belief that many of the opinions hitherto entertained in regard to the nature and influence of these causes must have been adopted on very inadequate evidence; at least, they are by no means in accordance with many of the facts adduced in the course of the present inquiry, and to which we shall now briefly advert.

It has been supposed by many that the diseases which prove so fatal to Europeans in these latitudes, especially fevers, are, if not a necessary, at least a very general consequence of continued exposure to a high temperature. The sufficiency of this, however, as a uniform cause of sickness and mortality, is contradicted by the fact, that these vary considerably in different stations, the mean temperature of which is nearly alike. The range of the thermometer, for instance, in Antigua and Barbadoes, is rather higher than in Dominica, Tobago, Jamaica, or the Bahamas; yet we find that the troops in the latter stations suffer nearly three times as much as those in the former. The preceding pages also afford several instances in which epidemic fever made its appearance, and raged with the utmost virulence during the winter months—a circumstance not likely to have taken place if that disease had originated in increased temperature. We may also state that the epidemic fevers which prevailed at Grenada in 1793, and at St. Christopher's in 1812, two of the most fatal which ever appeared in the West Indies, commenced, the former in March, and the latter in February, and continued with unabated violence during the whole of the cold season.

Elevated Temperature.

If elevated temperature was an essential cause of the mortality to which Europeans are liable in this climate, we might expect it in every year to produce similar effects; whereas, on the contrary, it appears, from the tabular statements in the preceding Report, that the mortality in one year is sometimes twenty times as high as in another, without any perceptible difference in the range of temperature. This fact has already attracted the notice of some medical authors, who, in treating of yellow fever, adduce instances of various epidemics both within and beyond the tropics, during which the temperature was not above the average, and was sometimes even a little below it, and inversely where the existence of a high temperature was not attended with the prevalence of fever\*.

In accounting for the unhealthiness of these colonies, great influence has been ascribed to excess of moisture, and the inference derives plausibility from various facts in the history of tropical fevers, especially their great prevalence along the sea-coast, at the outlets of rivers, and in the vicinity of swampy level grounds. This hypothesis, however, seems at variance with the facts contained in the previous Report; for if the mortality of the troops depended materially on the influence of moisture, we might expect it to attain its maximum in those stations where the fall of rain was the greatest, whereas the average mortality of the troops in Jamaica is at least double that which prevails among those in British Guiana, though the quantity of rain which falls in that island is little more than half as great: and in the preceding pages there are adduced many instances in which epidemic fever has broken out, and raged with great violence, at a period when no rain had fallen for several months; nay, in some stations a dry, in others a wet season, is looked on as the most unhealthy—an anomaly not likely to occur if excess of moisture was uniformly an essential cause of insalubrity.

Excess of Moisture.

It must also be remembered that this excess of moisture is not confined to the West Indies, but is a general characteristic of all tropical regions: and were it so productive of disease in the

\* Craigie, *Practice of Physic*, pp. 224, 226, 227.

Deductions from  
Report.

Western hemisphere, the same effect might be expected to ensue from it in the East; whereas, on the contrary, the Malabar Coast, which is deluged by rain for six months in the year, is generally one of the most healthy quarters in the Madras Presidency.

That neither heat nor moisture can be the primary causes which influence the health of troops in the West Indies, is at once established by referring to the comparative view of the ratio of mortality in each year at every station, exhibited in Tables XXXIV. and LX., in which there are numerous instances of two adjacent islands, or even of two contiguous stations in the same island, being subject in an equal degree to the operation of these agencies, and yet while the one has been desolated by the ravages of fever, the other has been enjoying a degree of salubrity equal to that of Great Britain.

Conjoined effects of  
high Temperature  
and great Moisture.

Though heat and moisture are not the primary causes of fever, however, it is highly probable their operation tends in some measure to increase its intensity. The Tables, illustrating the influence of the seasons on the health of the troops in each station, show that the greatest number of admissions into hospital and deaths has, on the average of a series of years (though not uniformly or equally in each year), taken place in those months when the greatest degree of heat was combined with the greatest moisture; and it may be observed as a striking exemplification of this fact, that as the sun proceeds northward in the ecliptic, carrying heat and moisture in his train, the period generally termed the unhealthy season, is later in the northern colonies than in those to the south.

The unhealthy character of that period of the year in which the greatest degree of heat and moisture is combined, is not, however, confined to the West Indies, but extends also to the East, as well as over a large portion of the Northern temperate zone. In the Mediterranean stations particularly, the admissions into hospital and deaths among the troops average nearly twice as high between July and October as during any other months of the year. Even in Canada, the same peculiarity is observable, though not in so marked a degree; and conversely in stations southward of the equator, that period of the year, which on the north of the line is the most unhealthy, becomes in the south the most salubrious, in consequence of the seasons being reversed. The calculations on which these statements are founded, will be submitted in subsequent Reports. At present we merely advert to them in order to guard against the error of referring to the climate of the West Indies exclusively, phenomena which are common not only to other tropical regions, but also to those of the temperate zone.

Absence of Trade  
Winds during the  
Sickly Season.

A knowledge of this fact at once overturns a plausible hypothesis which attributes the unhealthy character of the West Indies during what is termed the sickly season, viz., from July to October, to the want of the free ventilation afforded by the trade-winds during the rest of the year, but which at this period either cease altogether, or become very irregular. But though these two events, the failure of the trade-winds and the increase of sickness and mortality, take place at corresponding periods, the latter can never be regarded as a necessary consequence of the former, when we find that in other quarters of the globe, beyond the range of the trade-winds, that is, in countries north of the 30th and 32d degree N.L., and in which ventilation is quite as perfect at that period as at any other, the unhealthy nature of these months is marked as strongly as in the West Indies.

Influence of  
Miasma from the  
South American  
Continent.

This same fact strikes also at the root of another hypothesis, which attributes the sickly season in these regions to some morbid principle generated in the vast forests and savannahs of the South American continent, and wafted to these islands by the south-westerly winds which generally prevail during that period. Besides, were this hypothesis correct, we might expect that British Guiana would, from its proximity to this cause of disease, be most subject to its operation, and consequently the most unhealthy; and that the colonies further to the north, being least exposed to it, would enjoy the greatest degree of salubrity. The result of our investigations into the comparative mortality in each colony shows, however, that their relative salubrity is by no means affected by their proximity to or distance from that continent.

Physical and Geolo-  
gical Character of  
the Soil.

Some, who are conscious of the difficulty of accounting for the unhealthy character of these colonies by the operation of general causes, endeavour to trace it to the influence of local circumstances, in particular to exhalations or emanations from the soil. To illustrate, therefore, the nature and extent of the operation of this alleged cause, we have stated, as accurately as our information will admit, the physical and geological characters of the soil in each island, and in the immediate vicinity of each station; and by comparing these with the mortality there, have ascertained that at many where the soil appears exactly the same the rate of mortality is very different, and at others, where the soil is very different, the rate of mortality is much the same. It is also to be observed that, while the soil and its physical characters are the same in every year, the sickness and mortality are extremely variable, and only in certain seasons and years attain an extraordinary degree of intensity. It frequently happens, too, that a station which has been remarkable for its sickly character for one or two seasons, becomes, without any perceptible reason, just as remarkable for its salubrity, which could scarcely happen if the cause of that sickness and mortality existed in the soil, which was constantly there to produce it.

The agency, real or supposed, of marshes is liable to a similar objection. That the vicinity of marshes, swamps, and lagoons, is generally subject to fevers, both of the intermittent and the remittent type, is a fact sufficiently established by multiplied experience, both in tropical countries and within the temperate zones. But that remittent or yellow fever may be generated where no such cause is in operation to produce it, and that consequently it is impossible to establish a necessary connexion between this cause and the appearance of that disease, is sufficiently established by the fact that the sickness and mortality in British Guiana and Honduras, where swamps and marshes most abound, are considerably less than at Up-Park Camp, and several of the other stations in Jamaica, remote from the operation of any such agencies.

The same remark may be applied to excessive or rank vegetation, to the influence of which



much of the sickness and mortality at some of the stations has been ascribed. To both of these causes, indeed, the remark already made regarding the influence of the soil, is strictly applicable. The marshy lands and the rank vegetation exist at many of the stations in every year, whereas the disease, which is represented to proceed from them, is only of occasional occurrence, and the foregoing Report shows that in some years the extent of mortality has been ten times as great as at others, when the degree of heat and moisture by which the marshy soils and vegetation are most likely to have been affected, have been much the same.

The object of this Report is rather to point out effects than to speculate upon causes, especially where they are so much involved in doubt and obscurity. We have merely referred to these alleged sources of disease to show how much they are at variance with numerical results, and because so long as the causes which affect the health of troops in the West Indies, are held to be accounted for by theories founded on error, it is not to be expected that others will be started more consistent with truth.

We are too sensible of the difficulty of the subject to venture on any theory of our own, which might on subsequent examination prove as futile as those which preceded it; but we merely wish to call the attention of such persons as may be disposed for further inquiry, to the circumstance that as yet no experiments have been made on the electrical condition of the atmosphere in the West Indies, during periods of epidemic, and as it is possible either an excess or deficiency of that powerful though unseen agent, may exercise an important influence on the vital functions, the subject seems worthy of attention. Heat and moisture are well known to be intimately connected with the development of electrical phenomena, and its influence on vegetation has also recently been established by experiment; consequently if the prevalence of disease could be satisfactorily traced to that source, the reason why heat, moisture, and vegetation should have been mistaken as the causes, when acting only as auxiliaries, would be readily accounted for; and even should the results leave the cause of disease as undetermined as before, science will at least be benefited by the inquiry.

A comparison of the relative mortality at each station, with its topographical peculiarities as detailed in the preceding portion of this Report, will afford much information in regard to the influence of different localities on the health of troops. The instances of Fort St. George at Tobago, Morne Fortuné at St. Lucia, and Morne Bruce at Dominica, demonstrate that mere elevation to the height of 600 or 700 feet, instead of securing a healthy position, seems rather to have the reverse tendency. The records of the mortality at Stoney Hill, too, show that an elevation even of 1360 feet is insufficient to secure an immunity from the remittent fever of Jamaica; but the details we have supplied in regard to the troops at Maroon Town and some of the smaller outposts demonstrate beyond a doubt, that, at an elevation of from 2000 to 2500 feet, they are likely to be either wholly exempt from that disease or to encounter it in so very modified a form, that the mortality from all causes will not on the average of a series of years, materially exceed that to which an equal number of European troops would be subject in the capital of their native country. The diseases of the tropics seem, like the vegetable productions of the same regions, to be restricted to certain altitudes and particular degrees of temperature. The researches of Humboldt on this subject have tended to establish, that yellow fever is never known beyond the height of 2500 feet, so that the nearer this boundary can be approached the more likely is the health of the troops to be secured.

Influence of  
Locality.

Where sufficient elevations cannot be obtained, the localities which appear least subject to yellow fever, are low sandy tongues of land or peninsulas jutting into the sea, and not shut in by any high ground immediately in rear, similar to those on which the barracks at Fort Augusta and Lucea are built, and where the troops have generally been more exempt from the epidemics of Jamaica, than at any of the other stations except those in the mountains. It cannot be affirmed that these will prove, like Maroon Town, uniformly healthy, but there seems good reason to suppose that on the average of a long series of years the mortality there will be considerably below the average.

The superior salubrity of the Windward over the Leeward side of the West India islands has been supposed to afford a ready means of obtaining better localities for the troops. But though the Windward side may, from its free exposure, be cooler and more pleasant, we are by no means certain it will possess such decided advantages in salubrity. That is a point which yet requires confirmation by numerical results, and we have had sufficient experience in the course of this investigation to put us on our guard against drawing deductions as to the salubrity of stations from any other source. So far as we can learn, however, there are many instances in which epidemic fever has been found to prevail to a very great extent on the Windward as well as the Leeward side of the islands, but as the white population is less dense in the former, the deaths not being numerically so high have attracted less attention, and we conceive it possible this circumstance may have given to the Windward side a higher character for salubrity than it really merits. In Jamaica, the only island in which we have been able to establish the rate of mortality in different directions along the coast, no such superiority in the salubrity of one side as compared with the other has been observed.

Except so far as regards elevation, therefore, it must be admitted that it is exceedingly difficult, if not impossible, to point out any practical rule to be followed in the choice of healthy localities for the troops. The example of Up-Park Camp is sufficient to show that even a position apparently remote from the noxious agencies of swamps and vegetation, with a free exposure, dry soil, and superiority of comfort and accommodation, may, without any assignable cause, prove uniformly unhealthy. It is probable the progress of our investigation into the influence of different localities on the health of troops in other quarters of the globe may open up fresh sources of information on this interesting and important subject, and enable us to appreciate with more accuracy the agencies by which so much sickness and mortality have been occasioned. We shall therefore defer any further observations till we have an opportunity of submitting the other Reports now in course of preparation.





**APPENDIX TO REPORT**

**ON THE**

**SICKNESS, MORTALITY, AND INVALIDING**

**AMONG THE TROOPS SERVING**

**IN**

**THE WEST INDIES.**

**a**

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	No. of App.		No. of App.
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<i>Ditto ditto at Port Antonio.</i>	[19]		

**which**

## WINDWARD AND LEEWARD

Showing the 1 inclusive.—Extracted from the Medical Quarterly Returns.

Classes of Diseases.	Yea Str Specific Dis	1832		1833		1834		1835		1836		From 1817 to 1836				Total for each Class of Disease.
		4331		4823		5407		5462		4983		Aggregate Strength 86,661				
		Adm.	Died.	Adm.	Died.	Adm.	Died.	Adm.	Died.	Adm.	Died.	Admitted.		Died.		
												By each Disease.	By each Class of Disease.	By each Disease.	By each Class of Disease.	
Fevers.	Feb. Inter. Qu	1768	1	1591	3	1091	3	1308	4	2493	7	24607	62163	149	3195	1047
	" Tertian	8	..	1	..	..	..	..	..	..	..	1973		11		
	" Quartan	..	..	..	..	..	..	..	..	..	..	133		1		
	" Remitt	470	38	423	37	329	30	540	86	947	109	17799		1966		
	" Cont. C	369	8	668	23	581	21	947	30	870	54	16821		726		
	" Icterode	..	..	..	..	..	..	1	1	..	..	774		331		
	" Typhus	..	..	1	1	..	..	..	..	..	..	48		11		
Eruptive Fevers.	" Synocha	..	..	..	..	..	..	..	..	..	..	8	..	13	1	19
	Variola	..	..	..	..	2	..	3	..	..	..	4	..			
	Rubeola	..	..	..	..	..	..	..	..	..	..	8	..			
	Scarlatina	..	..	..	..	..	..	..	1	1	..	1	1			
Diseases of the Lungs.	Pneumonia	87	5	62	5	82	9	47	6	56	4	1941	9975	112	906	157
	Pleuritis	2	..	..	..	8	..	7	..	..	..	34		1		
	Hemoptysis	30	4	23	2	32	3	16	4	17	..	303		34		
	Phthisis Pulm	64	48	49	23	64	24	79	41	32	24	1023		580		
	Catarrhus Acu	339	3	537	4	448	6	399	1	202	3	5108		49		
	" Chr	132	10	117	15	136	7	124	4	123	17	1409		127		
	" Asthma period.	13	..	13	1	14	..	14	..	6	..	92		2		
	" Dyspnoea	1	..	3	..	10	1	3	..	9	..	63		1		
Diseases of the Liver.	" Pertussis	..	..	..	..	..	..	..	..	..	..	2	..	1946	161	77
	Hepatitis Acu	26	1	32	..	48	2	72	3	29	3	903	79			
	" Chr	17	2	40	1	23	4	28	1	25	1	902	76			
	Icterus	9	..	4	..	7	..	6	..	11	..	141	6			
	Peritonitis	..	..	..	..	1	1	2	2	5	1	25	7	14076	608	
	Gastritis	47	5	31	2	6	2	6	..	4	..	161	26			
	Enteritis	11	4	10	1	9	2	6	2	2	1	254	38			
	Hæmatemesi	1	..	1	..	3	1	1	..	..	..	34	2			
		934	45	1112	39	897	41	699	50	557	35	14076	608			

22

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NOTE.—The same Classification of the Minor Diseases has been taken place here as The Deaths under the head of Morbi Cutis have been principally from

[illegible]

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eward Command--(continued).

S.

1829		1830		1831		1832		1833		1834		1835		1836		From 1817 to 1836			
1581		1520		1457		1379		1347		1310		1241		1188		Aggregate Strength 40,934			
Adm.	Died.	Adm.	Died.	Adm.	Died.	Adm.	Died.	Adm.	Died.	Adm.	Died.	Adm.	Died.	Adm.	Died.	Admitted.		Died.	
																By each Disease.	By each Class of Diseases.	By each Disease.	By each Class of Diseases.
18	1	35	..	48	1	123	..	87	2	27	..	47	..	37	..	881		14	
1	..	2	..	..	..	..	..	1	..	..	..	..	..	..	..	103		..	
55	3	53	3	33	3	36	2	21	..	27	2	30	3	38	3	1420	6856	77	190
111	3	125	4	121	2	120	4	87	1	87	1	60	4	47	2	4426		92	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	26		7	
..	..	11	..	2	1	..	..	..	..	..	..	..	..	..	..	301		98	
..	..	..	..	..	..	..	..	..	..	3	1	6	..	..	..	72	373	4	102
56	12	36	9	27	5	28	6	19	7	33	4	16	1	13	2	1811		159	
..	..	1	..	1	..	1	..	..	..	1	..	..	..	3	1	12		1	
2	..	7	..	4	1	4	3	6	..	3	2	..	..	1	1	61		11	
11	7	10	8	10	8	12	7	11	8	8	7	9	7	5	4	538		390	
36	3	43	2	42	3	62	1	54	..	41	2	85	2	43	1	1190	4048	33	676
19	7	27	12	8	3	21	7	28	8	5	..	21	3	13	4	350		73	
..	..	1	..	..	..	..	..	5	1	1	..	4	1	2	..	51		7	
..	..	..	..	1	..	..	..	..	..	2	..	2	..	14	..	35		2	
3	..	..	..	1	..	6	1	3	1	..	..	2	1	1	..	229		14	
12	..	2	1	3	..	1	..	1	..	3	1	2	2	2	1	71	301	23	37
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1		..	
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5		2	
..	..	1	..	..	..	..	..	..	..	1	1	..	..	..	..	5		2	
9	3	5	..	..	..	..	..	..	..	2	1	..	..	1	..	61		14	
..	..	1	..	..	1	1	1	1	..	..	..	..	..	..	..	8		2	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1		..	
11	1	27	4	35	5	30	1	44	4	25	4	31	6	21	3	1329		115	
2	1	6	..	11	2	8	1	7	2	8	2	5	..	6	4	254	3796	85	303
2	..	10	..	11	..	1	1	3	..	4	..	6	..	4	1	48		3	
30	..	21	..	29	..	23	1	19	..	23	1	11	..	2	..	319		6	
..	..	3	..	..	..	1	..	..	..	..	..	..	..	..	..	53		4	
43	6	28	..	45	7	36	4	28	..	21	1	19	3	38	2	1543		69	
21	..	7	..	9	..	9	..	18	..	16	..	14	..	5	..	170		1	
1	..	..	..	1	1	..	..	..	..	..	..	1	..	..	..	7		2	
..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	2		2	
1	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	10		1	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5		..	
9	6	4	1	3	3	3	2	2	2	2	2	5	4	3	1	78	428	39	92
2	1	4	1	2	1	1	..	1	..	5	1	3	..	1	..	47		13	
3	1	6	..	3	..	..	..	3	..	..	..	4	..	..	..	104		9	
3	2	..	..	2	..	3	1	1	1	4	3	5	1	1	..	32		12	
8	..	8	1	4	..	..	..	..	..	1	..	1	..	5	1	86		5	
3	..	6	3	7	..	4	..	11	1	5	1	4	..	7	2	57		9	
5	1	7	3	..	..	6	2	1	1	3	1	1	..	2	1	96		25	
1	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	13	215	8	87
6	4	9	3	3	2	5	2	4	3	5	..	3	3	3	2	106		54	
44	1	38	..	43	..	50	1	81	2	77	1	104	..	104	..	1698		10	
31	..	27	..	46	..	60	..	35	2	23	..	16	..	26	..	1312	3028	13	23
1	..	1	..	2	..	1	..	..	..	..	..	..	..	1	..	18		..	
..	..	3	..	3	..	2	..	..	..	..	..	1	..	..	..	79		..	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	18		..	
1	..	1	..	2	..	..	..	2	..	3	..	5	..	3	..	55		..	
6	..	4	..	4	..	7	..	5	..	10	..	1	..	2	..	92	705	..	2
6	..	10	..	2	..	8	..	10	..	8	..	6	..	9	..	188		..	
8	..	9	..	15	..	8	..	14	..	13	..	9	..	16	..	255		1	
1	..	2	..	..	..	..	..	2	..	1	..	1	..	2	..	18		1	
39	..	38	..	43	..	49	..	55	1	40	1	29	..	37	..	809		8	
1	..	1	..	1	..	1	..	..	..	1	..	3	..	..	..	20		..	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	7430	..	30
..	1	1	1	3	..	1	..	3	..	2	..	3	..	1	..	22		4	
279	1	166	1	107	..	155	..	137	..	116	1	92	1	89	2	6578		18	
..	..	..	..	2	..	..	..	..	..	2	..	..	..	..	..	18		1	
4	..	20	..	2	..	8	..	5	..	9	..	3	..	3	..	106		..	
49	..	49	..	37	..	42	..	48	..	45	..	50	1	35	1	1271		10	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	59	3274	4	35
73	3	59	1	75	..	74	..	47	..	57	..	48	1	50	..	1676		10	
3	..	..	..	..	..	2	..	..	..	1	..	..	..	5	..	42		1	
5	..	7	..	11	2	3	..	4	..	6	1	2	1	3	..	101		8	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1		1	
25	..	45	..	57	1	51	..	23	..	28	..	11	..	7	..	1573	1573	1	1
4	..	25	..	19	..	24	..	18	..	32	..	14	..	12	..	636	636	..	..
33	..	5	..	29	..	8	..	3	..	7	..	9	..	7	..	277	277	8	..
..	..	6	..	3	..	..	..	2	..	7	..	8	..	4	..	120		4	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1		1	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2		..	



Showing the Deaths among the Troops serving in BRITISH GUIANA—(continued).

II. BLACK TROOPS AND PIONEERS.

Classes of Diseases.	Years  Strength Specific Diseases.	1817	1818	1819	1820	1821	1822	1823	1824	1825	1826	1827	1828	1829	1830	1831	1832	1833	1834	1835	1836	Total from 1817 to 1836	
		415	122	129	110	131	184	175	188	75	74	132	170	216	208	210	190	180	189	156	146	Aggregate Strength 3,500	
																						Total by each Disease.	Total by each Class of Disease.
																						24	28
Fevers.	Febris Remittens . .	2	..	..	..	..	1	3	2	5	2	1	2	..	2	2	1	..	..	1	..	4	28
	„ Cont. Com. . .	1	..	2	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	4	
Diseases of the Lungs.	Pneumonia . . .	1	..	..	..	1	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	4	59
	Phthisis Pulmonalis.	4	2	1	1	..	4	1	..	1	..	2	2	3	2	2	4	5	..	..	2	36	
	Catarrhus Acutus .	..	..	..	..	..	..	1	2	..	..	..	..	..	1	..	1	1	..	..	..	6	
	„ Chronicus . . .	..	..	1	..	..	3	3	..	..	..	..	..	..	2	..	..	..	..	2	..	11	
Diseases of the Liver.	Asthma . . . . .	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	2	1
	Hepatitis Acuta . .	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	
Diseases of the Stomach and Bowels.	Enteritis . . . . .	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	2	19
	Dysentaria Acuta . .	2	..	1	..	2	3	1	1	..	..	..	1	..	1	1	..	..	..	..	..	13	
	„ Chronica . . . .	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
	Colica . . . . .	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	
Diseases of the Brain.	Diarrhoea . . . . .	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	2	11
	Phrenitis . . . . .	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	
	Apoplexia . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	1	..	2	1	1	7	
	Paralysis . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	
Dropsies.	Mania . . . . .	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	8
	Delirium Tremens .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	
	Anasarca . . . . .	1	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	1	..	4	
	Ascites . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	1	..	..	..	..	3	
All other Diseases.	Hydrothorax . . .	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	8
	Rheum. Acutus . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	
	„ Chronicus . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	
	Phlegmon et Absces.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1		
	Ulcus . . . . .	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
	Contusio . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	
	Morbi Cutis . . . .	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	
	Hydarthrus . . . .	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
Total . . . . .	Convulsio . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	134
		12	2	6	2	4	11	9	5	7	5	5	10	6	13	6	8	8	5	5	5	134	

ABSTRACT No. III. OF APPENDIX.

Showing the Ratio of Mortality among the Negro Slave Population in each of the WEST INDIA COLONIES during the undermentioned periods\*.

COLONIES.	Period over which the Average has been taken.	Average Population.			Average Yearly Deaths.			Annual Deaths to 1000 living.			Annual Deaths to total Popula- tion.
		Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Both Sexes.	
Trinidad . . . . .	1816 to 1828	13,444	10,786	24,230	405	326	731	30	30	30	1 in 33
Tobago . . . . .	1819 to 1832	6,554	7,118	13,672	306	262	568	47	37	42	1 in 24
Demerara and Essequibo	1826 to 1832	37,949	32,475	70,424	1,299	826	2,125	34	25	30	1 in 33
Berbice . . . . .	1819 to 1831	12,029	10,093	22,122	393	295	688	33	29	31	1 in 32
Jamaica . . . . .	1817 to 1829	168,277	170,699	338,976	4,534	3,946	8,480	27	23	25	1 in 40
Grenada . . . . .	1817 to 1831	12,371	13,147	25,518	441	406	847	36	31	33	1 in 30
St. Vincent's . . . . .	1817 to 1831	12,110	12,267	24,377	413	344	757	34	28	31	1 in 32
Barbadoes . . . . .	1817 to 1829	36,310	42,491	78,801	1,142	1,095	2,237	31	26	28	1 in 35
St. Lucia . . . . .	1816 to 1931	6,621	7,878	14,499	233	195	428	35	25	30	1 in 34
Dominica . . . . .	1817 to 1826	8,008	8,734	16,742	278	252	530	35	29	32	1 in 32
Antigua . . . . .	1818 to 1827	14,577	16,612	31,189	440	415	855	30	25	27	1 in 36
St. Christopher's . . . . .	1817 to 1831	9,465	10,304	19,769	283	264	547	30	26	28	1 in 36
Montserrat . . . . .	1818 to 1827	2,966	3,479	6,465	101	92	193	34	26	30	1 in 34
Nevis . . . . .	1817 to 1831	4,619	4,768	9,387	122	108	230	26	23	25	1 in 41
Total . . . . .		345,320	350,851	696,171	10,390	8,826	19,216	30	25	28	1 in 36

\* This Abstract has been compiled from the Official Returns of the Population, &c. of the Colonies, in Supplement to Part III. of Statistical Tables, published by Mr. Porter, under the authority of the Board of Trade.





Showing the Deaths among the Troops serving in the Island of Tobago, from 1817 to 1836 inclusive, with a Specification of the Diseases by which they were caused.

## I. WHITE TROOPS.

Classes of Diseases.	Years	Strength	1817	1818	1819	1820	1821	1822	1823	1824	1825	1826	1827	1828	1829	1830	1831	1832	1833	1834	1835	1836	Total from 1817 to 1836	Total by each Class of Disease.
			238	216	194	134	137	137	163	186	185	156	194	159	173	176	170	164	159	153	148	160	Aggregate Strength 3,402	Total by each Class of Disease.
			Specific Diseases.																					Total by each Class of Disease.
Fevers.	Febris Intermittens . . .		..	2	1	..	..	..	..	..	..	..	..	..	..	..	3	..	..	..	..	1	7	354
	,, Remittens . . .		34	8	12	5	..	..	1	..	8	8	3	10	14	22	11	7	4	1	..	14	162	
	,, Continua Com. . .		..	2	1	1	5	2	..	6	1	..	..	..	..	..	..	..	..	..	..	..	18	
	,, Icterodes . . .		..	16	21	101	29	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	167	
Diseases of the Lungs.	Pneumonia . . .		4	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	1	7	37
	Hæmoptysis . . .		..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	2	
	Phthisis Pulmonalis . . .		4	3	..	..	..	2	1	..	..	..	1	..	..	..	2	1	3	..	1	4	22	
	Catarrhus Acutus . . .		..	..	..	..	..	..	..	1	..	1	..	..	1	..	..	..	..	1	1	..	4	
Diseases of the Liver.	,, Chronicus . . .		..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	2	7
	Hepatitis Acuta . . .		..	..	..	..	..	2	..	..	..	..	..	..	..	1	..	..	..	..	..	..	3	
	,, Chronica . . .		1	..	..	..	..	2	..	..	..	1	..	..	..	..	..	..	..	..	..	..	4	
	Gastritis . . .		..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	
Diseases of the Stomach and Bowels.	Enteritis . . .		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	2	82
	Dysentery Acuta . . .		3	1	2	1	..	..	..	..	7	2	3	2	1	2	1	2	..	1	1	4	32	
	,, Chronica . . .		4	4	1	..	2	3	..	4	..	1	..	..	..	..	1	2	1	..	..	..	23	
	Diarrhoea . . .		..	..	..	..	1	..	..	1	..	..	3	..	..	..	..	1	1	..	..	14	21	
Diseases of the Brain.	Dyspepsia . . .		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	17
	Colica . . .		1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	2	
	Phrenitis . . .		..	..	..	1	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	3	
	Apoplexia . . .		..	..	..	..	..	1	..	..	..	..	..	2	..	..	..	..	..	..	..	..	3	
Dropsies.	Abscessus Cerebri . . .		..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	12
	Epilepsia . . .		..	..	..	..	..	..	1	1	2	3	1	1	..	..	..	..	..	..	..	..	9	
	Delirium Tremens . . .		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
	Anasarca . . .		2	1	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	5	
All other Diseases.	Ascites . . .		2	..	..	..	..	..	..	1	1	..	1	..	1	..	..	..	..	..	..	1	7	11
	Rheum. Chronicus . . .		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	
	Phlegmon et Abscess . . .		..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	1	..	3	
	Contusio . . .		..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	
All other Diseases.	Fractura . . .		..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	11
	Scorbutus . . .		..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
	Amputatio . . .		..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	
	Debilitas . . .		1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
All other Diseases.	Cachexia . . .		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	520
	Total . . .		56	38	43	109	37	12	4	10	16	21	13	15	20	26	23	11	12	6	5	43	520	
																							520	
																							520	

## II. BLACK TROOPS AND PIONEERS.

Classes of Diseases.	Years  Strength  Specific Diseases.	1817	1818	1819	1820	1821	1822	1823	1824	1825	1826	1827	1828	1829	1830	1831	1832	1833	1834	1835	1836	Total from 1817 to 1836	Total by each Class of Disease.
		142	129	163	193	262	171	135	99	92	86	74	77	63	57	55	64	68	59	57	55	Aggregate Strength 2,101	
																						Total by each Disease.	
Fevers.	Febris Remittens . .	1	..	1	..	..	..	..	..	..	..	..	..	2	..	..	1	..	..	..	..	5	18
	„ Cont. Com. . .	..	..	1	..	5	3	..	..	..	1	..	..	..	..	..	..	..	..	..	..	10	
	„ Icterodes . .	..	1	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	
Diseases of the Lungs.	Pneumonia . . .	2	..	..	..	..	..	..	..	..	2	..	..	..	..	..	1	5	..	..	..	10	25
	Pleuritis . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1		
	Phthisis Pulmonalis . .	..	1	1	..	1	..	..	..	1	..	1	1	..	..	..	1	1	1	..	9		
	Catarrhus Acutus . .	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	3		
„ Chron. . .	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1		
Dyspnoea . . .	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1		
Diseases of the Liver.	Hepatitis Chronica . .	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	2	2	
Diseases of the Stomach and Bowels.	Enteritis . . .	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	10	
	Dysentery Acuta . .	..	..	2	..	..	..	..	..	1	..	..	..	1	1	..	..	1	1	..	7		
	„ Chron. . .	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1		
	Colica . . .	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1		
Diseases of the Brain.	Apoplexia . . .	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	2	4	
	Paralysis . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1		
	Epilepsia . . .	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1		
Dropsies.	Anasarca . . .	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	9	
	Ascites . . .	..	..	1	1	2	..	..	..	..	..	..	2	..	..	..	..	..	..	..	6		
	Hydrothorax . . .	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	2		
All other Diseases.	Atrophia . . .	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	3	
	Tetanus . . .	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1		
	Amputatio . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1		
Total . .		4	2	7	4	8	3	2	1	1	8	2	3	6	2	1	3	6	4	2	2	71	71

Showing the Deaths among the Troops serving in the Island of GRENADA, from 1817 to 1836 inclusive, with a Specification of the Diseases by which they were caused.

I. WHITE TROOPS.

Classes of Diseases.	Years  Strength  Specific Diseases.	1817	1818	1819	1820	1821	1822	1823	1824	1825	1826	1827	1828	1829	1830	1831	1832	1833	1834	1835	1836	Total from 1817 to 1836	
		484	285	454	450	318	331	332	308	261	251	269	245	259	334	283	268	264	333	277	270	Aggregate Strength 6,267	
																						Total by each Disease.	Total by each Class of Diseases.
Fever.	Febris Intermittens.	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	2	165
	„ Remittens.	7	2	25	18	2	..	..	..	..	..	1	20	9	..	..	1	..	2	6	9	102	
	„ Cont. Com.	32	..	1	1	4	1	1	1	3	..	2	3	4	2	1	..	..	..	..	..	56	
	„ Icterodes.	1	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	
Diseases of the Lungs.	Pneumonia	1	..	..	1	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	4	41
	Phthisis Pulmonalis	8	2	..	1	2	1	2	..	..	2	..	2	1	..	3	3	2	..	3	1	33	
	Catarrhus Chronicus	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	2	4	
Diseases of the Liver.	Hepatitis Acuta.	..	2	..	..	3	5	2	..	2	1	..	..	..	..	..	..	..	..	..	..	15	28
	„ Chronica.	1	..	..	..	1	1	1	2	2	3	..	..	1	..	..	..	..	..	..	1	13	
Diseases of the Stomach and Bowels.	Enteritis	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	101
	Dysenteria Acuta.	4	3	..	..	4	3	1	1	5	2	..	1	..	1	..	..	..	..	1	..	26	
	„ Chronica	18	6	2	1	4	..	..	..	..	..	..	..	..	..	..	..	..	..	3	7	41	
	Colica	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
	Diarrhoea.	16	7	1	..	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	27	
	Cholera	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	1	..	..	3	
Diseases of the Brain.	Dyspepsia	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	29
	Phrenitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	
	Apoplexia	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	1	1	2	..	1	7	
	Epilepsia.	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	2	
	Mania	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
	Delirium Tremens	..	..	..	..	1	..	..	..	2	2	3	2	2	2	..	2	..	2	1	..	17	
Dropsies.	Cephalalgia	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	5
	Anasarca	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	3	
All other Diseases.	Ascites	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	18
	Rheum. Chronicus	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	2	
	Syphilis	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	2	
	Fistula	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	
	Ulcus	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	
	Vulnus	1	..	..	..	..	..	..	..	..	..	1	1	..	1	..	..	..	1	..	..	5	
	Contusio	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	
	Fractura	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	
	Concussio Cerebri	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	2	
Splenitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1		
Total.		92	30	31	23	24	15	8	6	15	12	8	33	18	5	6	9	5	9	15	23	387	387

II. BLACK TROOPS AND PIONEERS.

Classes of Diseases.	Years	1817	1818	1819	1820	1821	1822	1823	1824	1825	1826	1827	1828	1829	1830	1831	1832	1833	1834	1835	1836	Total from 1817 to 1836	
																						Aggregate Strength 1,899	
																						Total by each Disease.	Total by each Class of Diseases.
Fever.	Febris Remittens.	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	3	9
	,, Cont. Com.	..	..	..	2	..	..	..	1	..	..	..	..	..	1	1	1	..	..	..	..	6	
Diseases of the Lungs.	Pneumonia	2	..	..	..	..	1	1	..	..	..	1	..	..	2	..	1	..	..	..	1	9	18
	Hæmoptysis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	
	Phthisis Pulmonalis	..	..	3	..	..	..	..	..	..	..	..	..	1	1	..	1	..	2	..	..	8	
Diseases of the Liver.	Hepatitis Chronica.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	2	2
Diseases of the Stomach and Bowels.	Hæmatemesis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	8
	Dysenteria Acuta.	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	2	..	4	
	,, Chronica	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	2	
Diseases of the Brain.	Cholera	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	8
	Apoplexia	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	1	1	..	1	..	5	
	Mania	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	
Dropsies.	Delirium Tremens	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	2	4
	Anasarca.	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	1	
All other Diseases.	Ascites	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	1	..	3	5
	Abscessus	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	
	Ulcus	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
	Vulnus	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	
	Morbus Coxarius	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	
Total.	Hæmorrhagia	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	54
		4	..	3	3	1	1	1	4	..	..	1	..	2	11	2	4	2	6	6	4	54	

Showing the Deaths among the Troops serving in the Island of St. VINCENT's, from 1817 to 1836 inclusive, with a Specification of the Diseases by which they were caused.

I. WHITE TROOPS.

Classes of Diseases.	Years	Strength	1817	1818	1819	1820	1821	1822	1823	1824	1825	1826	1827	1828	1829	1830	1831	1832	1833	1834	1835	1836	Total from 1817 to 1836	
			519	311	394	366	310	286	339	439	429	401	309	318	279	278	293	318	351	537	535	421	Aggregate Strength 7,432	
			Specific Diseases.																				Total by each Disease.	Total by Class of Disease.
Fevers.	Febris Intermittens .		..	..	..	..	..	..	..	2	2	1	..	..	1	..	..	..	..	..	1	..	7	63
	,, Remittens .		1	..	4	4	1	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	12	
	,, Cont. Com. .		..	..	1	1	..	5	8	15	11	3	2	3	3	3	3	2	..	..	..	3	63	
	,, Icterodes .		..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
Eruptive Fevers.	Variola . . . .		..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2
	Scarlatina . . . .		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	
Diseases of the Lungs.	Pneumonia . . . .		1	1	..	1	..	..	..	..	..	3	1	..	1	..	..	1	..	2	..	..	11	78
	Hæmoptysis . . . .		..	..	..	..	..	1	..	..	1	1	..	..	..	..	..	2	1	2	..	..	8	
	Phthisis Pulmonalis .		5	..	1	3	3	2	2	2	..	3	1	1	..	1	1	3	2	3	6	2	41	
	Catarrhus Acutus .		..	..	..	..	..	..	..	..	3	1	..	1	..	..	..	..	..	..	..	..	13	
Diseases of the Liver.	,, Chronicus .		..	..	..	..	..	1	1	..	2	..	..	..	..	..	2	1	1	..	..	5	5	19
	Hepatitis Acuta . .		1	..	1	..	..	..	1	..	1	..	2	..	..	..	..	..	..	..	..	..	5	
	,, Chronica .		..	..	..	..	..	1	1	1	..	..	..	..	..	..	..	..	..	1	..	3	7	
	Gastritis . . . .		..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	2	
Diseases of the Stomach and Bowels.	Enteritis . . . .		1	1	1	..	..	..	1	..	..	..	..	..	..	..	..	1	1	..	..	..	6	180
	Hæmatemesis . . . .		..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
	Dysentæria Acuta . .		2	..	2	..	2	..	2	3	9	2	20	2	2	..	..	1	..	..	1	..	48	
	,, Chronica .		62	24	1	..	2	1	..	..	..	..	..	..	..	..	..	1	1	2	..	..	94	
	Diarrhœa . . . .		..	..	..	2	1	4	2	..	2	..	..	3	1	1	..	1	..	..	6	3	26	
	Cholera . . . .		..	..	..	1	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	3	
Diseases of the Brain.	Apoplexia . . . .		..	1	1	..	..	2	..	..	2	..	..	..	..	..	..	..	..	..	..	..	6	21
	Paralysis . . . .		..	1	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	3	
	Epilepsia . . . .		..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	
	Delirium Tremens . .		..	..	..	..	2	1	2	1	..	..	..	3	2	..	..	..	..	..	..	..	11	
Dropsies.	Anasarca . . . .		..	..	..	..	2	..	1	1	1	1	..	..	..	1	..	1	..	..	..	..	8	12
	Ascites . . . .		2	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	4	
All other Diseases.	Rheum. Acutus . . .		..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	20
	,, Chronicus . . . .		..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	
	Ulcus . . . .		..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	2	
	Vulnus . . . .		..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
	Contusio . . . .		..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	2	
	Ambustio . . . .		1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	2	
	Punitus . . . .		..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	2	
	Tetanus . . . .		1	..	..	1	..	..	2	1	..	..	..	..	..	..	..	..	..	..	..	..	5	
	Aneurisma . . . .		..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	
	Tumores . . . .		..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	
	Atrophia . . . .		..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	2	
Total . . .			77	30	13	13	17	18	24	29	33	22	28	14	10	7	8	16	8	10	14	17	408	408

II. BLACK TROOPS AND PIONEERS.

Classes of Diseases.	Years	Strength	1817	1818	1819	1820	1821	1822	1823	1824	1825	1826	1827	1828	1829	1830	1831	1832	1833	1834	1835	1836	Total from 1817 to 1836	
			296	122	98	67	47	43	35	39	36	35	27	22	21	20	18	26	28	30	33	32	Aggregate Strength 1,075	
			Specific Diseases.																				Total by each Disease.	Total by Class of Disease.
Fevers.	Febris Remittens .		1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	14
Eruptive Fevers.	Variola . . . .		..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	
	Pneumonia . . . .		1	1	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	
Diseases of the Lungs.	Phthisis Pulmonalis .		1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	3	
	Catarrhus Acutus .		..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	2	12
	,, Chronicus .		..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	
	Asthma . . . .		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	
Diseases of the Stomach and Bowels.	Dyspnœa . . . .		..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	3
	Enteritis . . . .		1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
	Dysentæria Acuta . .		1	..	..	1	..	..	1	..	..	..	2	1	..	..	..	..	..	..	..	..	6	
	,, Chronica .		2	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	
Diseases of the Brain.	Diarrhœa . . . .		..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	3
	Apoplexia . . . .		..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	2	
Dropsies.	Epilepsia . . . .		..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	3
	Anasarca . . . .		..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..	..	3	
All other Diseases.	Rheum. Chronicus . .		..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	2	4
	Fistula . . . .		..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	
	Erysipelas . . . .		..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	
Total . . .			7	1	7	2	1	2	2	3	1	1	3	3	1	..	1	..	2	2	..	..	39	39

Showing the Mortality among the Troops serving in the Island of BARBADOES from 1817 to 1836 inclusive, with a Specification of the Diseases by which they were caused.

I. WHITE TROOPS.

Classes of Diseases.	Years	1817	1818	1819	1820	1821	1822	1823	1824	1825	1826	1827	1828	1829	1830	1831	1832	1833	1834	1835	1836	Total from 1817 to 1836	
		Strength																				Aggregate Strength 23,936	
		1654	1528	1291	894	795	718	791	1192	1173	1236	1145	1196	1248	1337	1096	1176	1405	1343	1484	1234	Total by each Disease.	Total by each Class of Diseases.
Fevers.	Febris Intermittens.	..	1	2	..	..	..	..	..	..	..	4	1	..	..	..	..	..	1	..	..	9	282
	,, Remittens.	22	..	..	..	11	11	..	..	..	..	..	1	1	..	1	..	1	1	..	..	49	
	,, Cont. Com.	32	9	4	8	38	13	1	9	7	7	5	4	..	3	2	4	5	2	6	10	169	
	Ictericodes . . .	1	2	1	37	10	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	52	
	Typhus . . .	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	1	..	..	..	3	
Diseases of the Lungs.	Pneumonia . . .	17	3	2	2	1	..	2	1	3	1	2	..	4	1	..	2	1	1	3	2	48	379
	Hæmoptysis . . .	1	1	1	2	..	..	..	1	1	2	1	..	..	1	1	1	..	1	..	..	14	
	Phthisis Pulmonalis.	25	41	18	5	9	6	3	13	13	12	7	10	16	12	11	19	5	9	14	10	258	
	Catarrhus Acutus . .	..	..	..	1	..	..	..	..	..	1	1	..	..	2	..	..	3	1	1	1	11	
	,, Chronicus . . .	..	2	1	5	..	..	..	..	..	1	1	1	8	9	2	5	5	..	..	8	48	
Diseases of the Liver.	Hepatitis Acuta . . .	..	1	1	..	2	2	..	..	..	..	..	1	..	1	..	..	..	..	2	..	10	34
	,, Chronica . . .	..	3	..	1	1	3	1	3	1	..	2	..	..	1	3	2	..	..	..	1	22	
	Icterus . . .	..	..	..	..	..	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	2	
Diseases of the Stomach and Bowels.	Peritonitis . . .	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	498
	Gastritis . . .	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	2	
	Enteritis . . .	3	..	1	..	..	1	..	..	2	..	..	..	..	1	..	3	..	..	..	..	11	
	Dysentæria Acuta . .	53	5	28	10	5	..	1	..	2	1	4	3	1	9	23	12	6	4	5	5	172	
	,, Chronica . . .	35	30	6	2	3	2	5	4	5	3	8	13	9	3	4	27	6	3	4	15	187	
	Dyspepsia . . .	..	..	..	..	..	..	..	..	..	..	..	1	3	3	..	2	..	..	..	..	9	
	Colica . . .	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	1	..	..	..	3	2	
	Obstipatio . . .	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	
	Diarrhœa . . .	5	3	1	4	3	..	7	14	13	1	3	2	16	22	2	..	5	1	2	104	7	
	Cholera . . .	..	1	1	..	1	1	..	..	..	2	..	1	..	..	..	..	..	..	..	..	7	
Diseases of the Brain.	Phrenitis . . .	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	2	80
	Apoplexia . . .	..	1	1	..	..	1	2	..	..	..	..	..	..	1	..	2	1	..	1	..	12	
	Paralysis . . .	..	1	..	1	..	..	..	..	..	..	..	..	..	2	..	1	..	..	2	1	8	
	Epilepsia . . .	1	1	..	..	1	1	..	1	3	..	..	..	..	..	..	..	..	..	..	..	5	
	Amentia . . .	1	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	1	..	..	..	4	
	Mania . . .	..	..	1	1	..	1	..	1	..	..	..	1	4	2	3	9	3	3	5	2	40	
	Delirium Tremens . .	..	..	2	..	..	..	1	1	..	..	1	4	4	2	3	9	3	3	5	2	1	
	Hydrocephalus . . .	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
Dropsies.	Ascites . . .	..	4	1	1	4	..	..	1	2	4	..	..	7	2	2	1	..	..	..	..	29	58
	Hydrothorax . . .	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	2	
	Anasarca . . .	1	5	3	3	2	1	1	2	..	1	..	..	..	2	1	3	..	..	..	2	27	
All other Diseases.	Rheum. Acutus . . .	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	1	1	..	..	..	4	70
	,, Chronicus . . .	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	2	
	Syphilis . . .	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	
	Phlegmon et Abscessus . .	1	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	3	
	Ulcus . . .	1	..	..	..	..	..	1	1	..	..	..	..	..	1	..	..	..	..	..	..	4	
	Vulnus . . .	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	3	
	Contusio . . .	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	..	..	..	..	2	
	Ambustio . . .	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	2	
	Fractura . . .	..	..	..	..	..	..	1	..	1	..	..	..	..	1	..	..	..	..	..	..	3	
	Cynanche Tonsillaris.	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	
	Carditis . . .	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
	Splenitis . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	5	
	Erysipelas . . .	..	..	..	..	..	..	1	..	..	..	..	1	1	1	1	1	..	..	..	..	1	
	Hæmorrhoids . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	2	
	Tetanus . . .	..	..	..	..	..	..	..	..	1	..	..	1	..	1	2	..	..	1	..	..	6	
	Convulsio . . .	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	1	
	Atrophia . . .	1	..	..	3	3	..	1	..	1	..	..	1	..	..	..	..	..	..	1	..	11	
	Scrophula . . .	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	2	
	Tumores . . .	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	2	
	Necrosis . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	1	
	Morbus Cordis . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	
	Diabetes . . .	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
	Debilitas . . .	..	..	..	..	..	..	2	1	..	..	..	1	..	..	..	..	..	..	..	..	4	
	Punitus . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	
	Elephantiasis . . .	..	..	..	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	
	Morbi Oculorum . . .	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	2	
Total . . .		204	117	76	91	96	42	18	58	58	54	39	43	61	65	72	110	51	34	47	65	1401	1401

NOTE.—In this Abstract are probably included the diseases of many invalids from other stations sent to this island preparatory to their return to England, and whose constitutions being much broken before their arrival, their deaths cannot well be attributed to the climate of Barbadoes. A large proportion of this class are likely to have been suffering under consumption or dysenteric affections of long standing, and it is probably to this circumstance that the fatal diseases reported under these heads are so numerous in this otherwise healthy island. As there is no means of effecting an accurate separation of the deaths among the invalids from those which have occurred among the troops composing the garrison, it has been deemed expedient to give them precisely as stated in the Medical Quarterly Returns.

Showing the Mortality among the Troops serving in the Island of BARBADOES from 1817 to 1836—(continued.)

II. BLACK TROOPS AND PIONEERS.

Classes of Diseases.	Years Specific Diseases.	1817	1818	1819	1820	1821	1822	1823	1824	1825	1826	1827	1828	1829	1830	1831	1832	1833	1834	1835	1836	Total from 1817 to 1836		
		Strength	483	457	822	849	668	686	670	593	389	361	366	355	320	296	283	246	305	275	244	253	Aggregate Strength 8,921	Total by each Class of Disease.
Fevers.	Febris Remittens	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	34	
	,, Cont. Com.	2	2	6	3	..	1	1	1	1	..	..	1	3	1	1	1	1	..	1	..	26		
	,, Icterodes	..	..	..	6	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7		
Eruptive Fevers.	Rubeola . . . .	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	2	2	
Diseases of the Lungs.	Pneumonia . . . .	2	..	5	8	1	3	3	1	1	3	1	2	3	3	2	1	..	..	..	..	39	167	
	Hæmoptysis . . . .	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	2		
	Phthisis Pulmonalis	2	3	2	9	16	23	9	8	6	11	5	4	..	1	..	3	..	..	2	..	104		
	Catarrhus Acutus ,, Chronicus	..	..	..	..	..	..	..	..	..	..	2	..	2	..	2	..	..	1	1	..	8		
Diseases of the Liver.	Hepatitis Acuta . .	..	..	..	..	1	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	3	8	
	,, Chronica	..	1	..	..	..	..	..	..	..	..	..	..	..	..	3	1	..	..	..	..	5		
Diseases of the Stomach and Bowels.	Peritonitis . . . .	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	2	108	
	Enteritis . . . .	2	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	4		
	Hæmatemesis . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1		
	Dysenteria Acuta . .	2	..	8	8	2	1	1	3	1	2	3	..	..	..	2	1	1	..	..	1	36		
	,, Chronica.	1	2	2	..	1	2	1	..	..	1	..	..	1	4	1	..	2	4	..	..	22		
	Dyspepsia . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1		
	Colica . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	2		
	Diarrhœa . . . .	3	..	2	3	6	5	1	1	..	..	..	..	1	1	4	5	1	..	3	2	38		
Diseases of the Brain.	Cholera . . . .	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	17	
	Apoplexia . . . .	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	2		
	Paralysis . . . .	..	..	..	1	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	3		
	Epilepsia . . . .	..	..	1	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3		
	Delirium Tremens . .	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1		
	Amentia . . . .	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	1	2	1	..	6		
Dropsies.	Mania . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	2	28	
	Anasarca . . . .	2	..	..	..	1	..	1	..	..	..	..	..	..	..	..	2	1	..	..	..	7		
	Ascites . . . .	..	..	..	1	1	1	2	2	1	1	2	1	1	..	2	3	..	..	2	..	20		
All other Diseases.	Hydrothorax . . . .	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	47	
	Rheum. Acutus . . . .	..	..	..	1	..	1	..	..	..	1	..	1	1	..	..	..	1	..	..	..	6		
	,, Chronicus . . . .	2	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	4	..	..	..	7		
	Phlegmon et Abscess.	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2		
	Ulcus . . . .	..	..	2	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	4		
	Luxatio et Subluxatio	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2		
	Vulnus . . . .	..	..	2	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	4		
	Contusio . . . .	..	..	..	..	..	..	1	..	..	..	..	..	2	..	..	..	..	..	..	..	3		
	Fractura . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	1	..	3		
	Concussio Cerebri . .	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1		
	Cynanche Tonsillaris	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1		
	Tetanus . . . .	..	..	1	..	..	..	..	..	1	..	..	..	..	1	..	..	..	..	..	..	3		
	Atrophia . . . .	..	..	..	..	2	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	3		
	Physconia . . . .	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1		
	Scrophula . . . .	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1		
	Aneurisma . . . .	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1		
	Hernia . . . .	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1		
	Lepra . . . .	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2		
	Elephantiasis . . . .	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1		
	Erysipelas . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1		
Total . .		19	9	34	45	39	41	23	16	15	20	13	14	20	16	23	21	15	9	11	8	411	411	

NOTE.—It does not appear whether the invalids of the Black Troops and Pioneers are generally sent to Barbadoes prior to being discharged; if so, it is possible some of the deaths here recorded may have taken place among them, and increased the ratio of mortality beyond what is strictly attributable to the climate of this island. The extremely large proportion of deaths by consumption, amounting to more than a fourth of what has occurred by all the other diseases, leads to the belief that this may have been the case; otherwise the climate of Barbadoes must have a very remarkable tendency to induce diseases of that nature.









howing the Deaths among the Troops serving in the Islands of ST. CHRISTOPHER'S, TORTOLA, and NEVIS, from 1817 to 1836 inclusive, with a Specification of the diseases by which they were caused.

I. WHITE TROOPS.

Classes of Diseases.	Years	1817	1818	1819	1820	1821	1822	1823	1824	1825	1826	1827	1828	1829	1830	1831	1832	1833	1834	1835	1836	Total from 1817 to 1836	
																						Aggregate Strength 5,800	
																						Total by each Class of Disease.	
																						Total by each Class of Disease.	
Fevers.	Strength	327	230	229	272	294	261	258	201	207	254	230	254	252	269	244	201	286	541	496	494		
	Specific Diseases.																						
	Febris Intermittens . . .	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	3	244
	,, Remittens . . .	7	30	1	1	5	1	6	5	9	..	..	..	1	2	..	1	12	1	15	38	135	
Diseases of the Lungs.	,, Cont. Com. . .	..	..	..	1	22	1	2	4	9	..	1	..	2	..	1	3	..	3	3	29	81	
	,, Icterodes . . .	8	..	..	16	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	25	
	Pneumonia . . .	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	..	5	55
	Hæmoptysis . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	2	..	3	
Diseases of the Liver.	Phthisis Pulmonalis . . .	4	3	..	1	3	1	2	1	1	2	..	1	3	1	..	2	5	1	2	..	33	
	Catarrhus Acutus . . .	..	2	..	..	..	..	..	..	..	..	..	..	..	..	1	2	..	..	..	..	5	
	,, Chronicus . . .	..	..	..	..	..	..	..	..	..	1	..	2	1	1	1	..	..	1	..	2	9	
	Hepatitis Acuta . . .	..	..	..	..	..	2	..	..	1	1	..	..	..	..	1	..	..	..	..	..	5	13
Diseases of the Stomach and Bowels.	,, Chronica . . .	..	..	..	..	..	1	..	..	..	..	..	2	2	1	..	..	..	2	..	..	8	
	Peritonitis . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	
	Gastritis . . .	..	..	..	..	..	..	..	..	2	..	..	..	1	..	..	..	..	1	..	..	4	
	Dysentæria Acuta . . .	4	..	..	..	..	..	..	..	..	2	..	2	..	1	..	..	2	2	8	6	25	60
Diseases of the Brain.	,, Chronica . . .	..	1	..	..	..	..	..	2	1	..	1	..	..	..	1	2	5	3	5	..	24	
	Colica . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	
	Diarrhœa . . .	..	1	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	3	
	Cholera . . .	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	2	
Dropsies.	Apoplexia . . .	..	..	..	1	..	..	1	..	..	..	..	..	1	..	..	..	..	1	..	..	4	16
	Epilepsia . . .	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	2	
	Delirium Tremens . . .	..	..	..	..	..	..	..	2	1	..	1	2	..	1	..	..	..	1	2	..	10	
	Anasarca . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	
All other Diseases.	Ascites . . .	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	1	..	..	3	5
	Hydrothorax . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	
	Rheum. Chronicus . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	
	Phlegm. et Abcessus . . .	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	
All other Diseases.	Vulnus . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	19
	Contusio . . .	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	2	
	Ambustio . . .	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	
	Fractura . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	2	
	Morbi Oculorum . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	
	Cynanche Tonsillaris . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	
	Cystitis . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	
	Erysipelas . . .	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	
	Scrophula . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	2	
	Morbus Coxarius . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	
	Aneurisma . . .	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	2	
	Convulsio . . .	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	
	Amputatio . . .	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
Total . .		25	39	2	20	31	4	13	12	26	8	4	10	16	14	6	9	23	24	41	85	412	412

II. BLACK TROOPS AND PIONEERS.

Classes of Diseases.	Years	1817	1818	1819	1820	1821	1822	1823	1824	1825	1826	1827	1828	1829	1830	1831	1832	1833	1834	1835	1836	Total from 1817 to 1836	
																						Aggregate Strength 1,426	
																						Total by each Class of Disease.	
																						Total by each Class of Disease.	
Fevers.	Strength	211	242	154	132	131	73	69	69	64	53	40	28	24	22	21	17	18	19	20	19		
	Specific Diseases.																						
Diseases of the Lungs.	Febris Remittens . . .	2	5	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	12	15
	,, Cont. Com. . .	..	..	..	..	2	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	3	
Diseases of the Liver.	Pneumonia . . .	2	1	..	..	1	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	6	34
	Hæmoptysis . . .	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
	Phthisis Pulmonalis . . .	..	4	6	3	2	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	20	
	Asthma . . .	..	..	..	..	..	..	1	3	..	..	..	..	..	..	..	..	..	..	..	..	4	
Diseases of the Stomach and Bowels.	Catarrhus Acutus . . .	..	..	..	..	1	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	3	9
	Hepatitis Chronica . . .	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
Dropsies.	Gastritis . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	4
	Dysentæria Acuta . . .	3	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	5	
	,, Chronica . . .	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
	Diarrhœa . . .	..	..	..	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	2	
All other Diseases.	Apoplexia . . .	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	2	4
	Ascites . . .	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
Total . .		8	11	11	4	6	6	..	2	4	2	..	1	1	1	1	1	1	2	1	3	66	66

## Show Medical Quarterly Returns.

Classes of Diseases.	Years . Specific Diseases.	1817		1833		1834		1835		1836		From 1817 to 1836			
		Strength		2915		3016		2881		2985		Aggregate Strength 51,567			
		3285										Admitted.		Died.	
		Adm.	Died.	Adm.	Died.	Adm.	Died.	Adm.	Died.	Adm.	Died.	By each Disease.	By each Class of Diseases.	By each Disease.	By each Class of Diseases.
Fevers.	Feb. Intermittens . . .	364	3	582	5	793	4	609	1	295	3	5090	46922	37	5253
	„ Remittens . . .	2416	1975	1828	153	1851	127	1687	144	1098	92	38393		5114	
	„ Com. Cont. . .	7	9	390	14	367	24	283	13	564	24	1971		86	
	„ Icterodes . . .	..	..	..	..	20	15	..	..	..	..	20		15	
	„ Synochus . . .	..	..	..	..	..	..	..	..	..	..	448		1	
Eruptive Fevers.	Variola . . .	..	..	..	..	..	..	..	..	..	..	3	10	..	..
	Rubeola . . .	..	..	..	..	..	..	..	..	..	..	7		..	
Diseases of the Lungs.	Pneumonia . . .	44	..	32	1	38	..	33	3	22	1	697	4357	15	368
	Pleuritis . . .	..	..	..	..	5	..	3	..	..	..	29		..	
	Hæmoptysis . . .	3	1	7	2	11	1	8	..	10	..	108		12	
	Phthisis Pulmonalis . . .	63	19	30	16	69	41	26	14	43	21	661		315	
	Catarrhus Acutus . . .	43	..	96	2	140	2	151	1	129	1	2438		18	
	„ Chronicus . . .	10	2	43	4	26	..	26	3	37	3	371		23	
	Asthma per. Conv. . .	..	..	3	1	2	..	4	1	7	..	41		3	
	Dyspnoea . . .	..	..	..	..	..	..	1	..	9	1	12		2	
Diseases of the Liver.	Hepatitis Acuta . . .	8	2	11	1	20	3	36	2	22	2	336	539	27	51
	„ Chronica . . .	18	..	..	..	..	..	..	..	..	..	109		20	
	Icterus . . .	11	..	4	1	3	..	5	1	6	..	94		4	
Diseases of the Stomach and Bowels.	Peritonitis . . .	..	..	..	..	1	1	..	..	..	..	2	12282	1	260
	Gastritis . . .	2	1	2	1	6	..	1	..	6	..	42		4	
	Renteritis . . .	3	2	4	1	2	1	5	..	3	1	52		11	
	Hæmatemesis . . .	1	..	..	..	..	..	..	..	3	1	9		4	
	Dysentæria Acuta . . .	343	1	245	13	221	9	95	4	178	..	4473		114	
	„ Chronica . . .	132	2	14	1	43	8	8	3	8	..	436		70	
	Dyspepsia . . .	179	1	6	..	6	..	43	1	51	1	579		5	
	Colica . . .	36	..	56	..	62	..	78	..	78	1	1107		4	
	Obstipatio . . .	1	..	2	..	30	..	34	..	28	1	196		2	
	Cholera Morbus . . .	20	..	14	1	4	..	3	..	14	..	216		3	
	Diarrhœa . . .	508	..	320	4	393	4	253	2	276	2	5169		42	
	Scirrhus Pylori . . .	..	..	..	..	..	..	..	..	..	..	1		..	
Diseases of the Brain.	Phrenitis . . .	1	1	2	..	8	6	..	..	..	..	31	720	13	137
	Cephalalgia . . .	..	..	..	..	..	..	..	..	..	..	6		..	
	Ictus Solis . . .	..	..	..	..	1	1	..	..	..	..	6		2	
	Apoplexia . . .	8	5	7	5	9	5	5	5	2	2	93		53	
	Paralysis . . .	2	..	3	..	3	..	3	2	2	1	33		7	
	Epilepsia . . .	1	5	25	3	30	6	6	..	7	..	258		19	
	Amentia . . .	..	..	7	..	2	..	2	..	5	..	39		1	
	Mania . . .	1	..	4	..	8	..	3	..	7	..	62		..	
	Delirium Tremens . . .	..	1	35	5	36	7	27	10	38	9	192		42	

PPENDIX.

[JAMAICA.

Troops in Jamaica—(continued).

ONEERS.

1828		1829		1830		1831		1832		1833		1834		1835		1836		From 1817 to 1836			
187		214		284		265		250		336		328		236		309		Aggregate Strength 5,729			
Adm.	Died.	Adm.	Died.	Adm.	Died.	Adm.	Died.	Adm.	Died.	Adm.	Died.	Adm.	Died.	Adm.	Died.	Adm.	Died.	Admitted.		Died.	
By each Disease.	By each Class of Diseases.	By each Disease.	By each Class of Diseases.	By each Disease.	By each Class of Diseases.	By each Disease.	By each Class of Diseases.	By each Disease.	By each Class of Diseases.	By each Disease.	By each Class of Diseases.	By each Disease.	By each Class of Diseases.	By each Disease.	By each Class of Diseases.	By each Disease.	By each Class of Diseases.	By each Disease.	By each Class of Diseases.	By each Disease.	By each Class of Diseases.
5	12	..	2	13	31	5	23	1	19	5	15	4	3	12	30	7	16	121	485	2	44
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	98	634	1	1
..	..	..	..	..	..	5	3	..	..	..	..	..	..	..	..	..	..	5	2	3	3
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
..	..	2	..	1	..	8	2	1	..	1	..	3	..	..	..	..	..	67	8	13	4
..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	8	58	39	2
..	..	3	2	1	1	3	2	..	..	2	2	..	..	1	1	..	..	87	206	1	..
..	..	2	..	3	..	5	..	4	..	3	..	..	..	..	..	..	..	13	3	..	..
..	..	3	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	16	16	2	2
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	1	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	1	..
..	..	1	1	2	1	1	..	1	..	..	..	2	..	..	..	3	..	87	7	173	4
..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	7	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
..	..	1	..	3	..	..	..	..	..	1	..	..	..	..	..	..	..	8	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	14	..	1	..
1	1	..	..	1	..	..	..	..	..	2	..	..	..	..	..	..	..	47	3	2	..
..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	3	..	..	..
..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
..	..	..	..	2	..	..	..	..	..	..	..	1	1	..	..	..	..	6	..	3	..
..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	7	..	1	..
..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	5	26	..	4
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	..	..	..
..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10	2	5	17
..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	3	2	16	3	10	..
3	1	5	..	4	..	2	1	2	..	1	..	2	..	1	..	..	..	68	13	91	1
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	2	..	4	..	1	..	..	..	..	..	1	..	30	6	..	..
..	..	..	..	..	..	..	..	1	..	3	..	..	..	..	..	..	..	6	..	..	..
..	..	..	..	..	..	..	..	2	..	2	..	..	..	1	..	..	..	25	17	86	..
..	..	1	..	3	..	2	..	1	..	2	..	..	..	..	..	..	..	1	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..
..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	8	..	..	..
14	..	4	..	1	..	3	..	15	..	18	..	3	..	2	..	3	..	221	1	230	2
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..
..	..	..	..	2	..	1	..	16	..	..	..	3	..	..	..	..	..	62	..	2	..
1	..	1	..	4	..	2	..	..	..	4	..	1	..	..	..	..	..	58	..	145	3
..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	19	..	..	..
..	..	..	..	1	..	..	..	..	..	1	..	1	..	..	..	..	..	13	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	1	..	1	..	7	..	2	..	1	..	1	..	..	..	145	145	..	..
1	..	..	..	4	..	..	..	1	..	2	..	..	..	..	..	1	..	49	49	..	..
..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	13	13	..	..
..	..	..	..	..	..	1	..	1	..	1	..	..	..	..	..	..	..	6	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	1	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	95	5	17
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10	..	2	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	1	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	7	..	2	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	1	..
..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	3	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	54	..	4	..
38	3	37	6	80	4	76	12	85	2	81	6	27	2	53	3	47	8	1935	1935	172	172

he Returns at that period did not admit of a complete separation.

Showing the Deaths among the WHITE TROOPS and BLACK PIONEERS at UP-PARK CAMP, from 1817 to 1836 inclusive, with a Specification of the Diseases by which they were caused.

Classes of Diseases.	Years	Strength	1817	1818	1819	1820	1821	1822	1823	1824	1825	1826	1827	1828	1829	1830	1831	1832	1833	1834	1835	1836	Total from 1817 to 1836	
			1392	1171	914	728	1113	379	269	582	607	445	867	480	509	609	691	725	652	690	840	857	Aggregate Strength 14,520	
			Specific Diseases.		Total by each Disease.		Total by each Class of Diseases.																	
Fever.	Febris Intermittens.		3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	1754
	,, Remittens.		69	61	438	107	126	164	16	12	199	27	188	52	16	48	48	56	29	20	38	13	1727	
	,, Cont. Com.		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	..	..	16	19	
Eruptive Fevers.	Variola . . . .		..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	..	..	..	3	3
Diseases of the Lungs.	Pneumonia . . . .		1	..	..	..	1	..	1	..	..	..	1	..	..	1	2	..	..	..	..	..	7	124
	Hæmoptysis . . . .		1	1	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	..	..	..	5	
	Phthisis Pulmonalis		9	4	10	8	6	1	4	6	3	3	3	..	3	8	5	3	3	7	1	7	94	
	Catarrhus Chronicus		3	3	..	..	4	..	..	..	1	..	1	..	..	..	..	..	1	..	2	1	16	
	Asthma . . . . .		..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	2	
Diseases of the Liver.	Hepatitis Acuta . .		1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	11
	,, Chronica . . . .		..	1	..	..	..	..	..	..	..	..	..	..	..	5	2	..	..	1	..	1	10	
Diseases of the Stomach and Bowels.	Peritonitis . . . .		1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	84
	Gastritis . . . . .		..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	
	Enteritis . . . . .		1	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	1	..	2	6	
	Dysenteria Acuta . .		..	..	..	..	1	1	1	..	..	..	..	..	..	..	..	3	..	..	..	..	6	
	,, Chronica . . . .		11	5	4	1	4	..	..	4	3	..	2	3	..	2	9	..	1	5	..	..	54	
	Dyspepsia . . . . .		..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	
	Diarrhoea . . . . .		3	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	3	2	1	..	11	
	Cholera . . . . .		..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	
Diseases of the Brain.	Obstipatio . . . . .		3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	30
	Phrenitis . . . . .		..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	5	..	..	7	
	Apoplexia . . . . .		..	..	..	..	1	..	..	1	..	..	..	1	..	..	2	1	2	..	..	..	8	
	Paralysis . . . . .		1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	
	Epilepsia . . . . .		..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	4	..	2	..	..	7	
Dropsies.	Delirium Tremens . .		..	..	..	..	..	..	1	..	..	..	..	1	..	1	..	..	..	..	2	..	5	11
	Anasarca . . . . .		1	..	1	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..	1	6	
	Ascites . . . . .		1	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	4	
All other Diseases.	Hydrothorax . . . .		..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	25
	Ulcer . . . . .		2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	
	Contusio . . . . .		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	2	
	Fractura . . . . .		..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
	Cynanche Tonsillaris		..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	1	..	..	..	..	3	
	Carditis . . . . .		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	
	Aneurisma . . . . .		..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	1	..	..	3	
	Splenitis . . . . .		..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	2	
	Erysipelas . . . .		..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	
	Debilitas . . . . .		2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	
	Tetanus . . . . .		..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	1	..	..	3	
	Scrophula . . . . .		..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	1	
	Atrophia . . . . .		1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	
	Purp. Hæmorrhagica		1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
Total . . . . .			115	76	458	117	145	168	22	26	207	32	195	57	22	73	76	66	51	48	44	44	2042	2042

ABSTRACT No. XV. OF APPENDIX.

Showing the Deaths among the WHITE TROOPS and BLACK PIONEERS at PORT ROYAL, from 1817 to 1836 inclusive, with a Specification of the Diseases by which they were caused.

Classes of Diseases.	Years	Strength	1817	1818	1819	1820	1821	1822	1823	1824	1825	1826	1827	1828	1829	1830	1831	1832	1833	1834	1835	1836	Total from 1817 to 1836.	
			254	200	272	257	262	278	312	250	293	234	283	281	268	283	237	156	257	205	252	234	Aggregate Strength. 5,068	
			Specific Diseases.																				Total by each Disease.	Total by each Class of Diseases.
Fever.	Febris Intermittens .	..	..	..	1	1	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	4	476	
	„ Remittens .	8	3	81	8	51	47	21	14	84	18	43	3	19	41	..	2	3	15	8	1	470		
	„ Cont. Com. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1			
	„ Typhus .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1			
Diseases of the Lungs.	Pneumonia .	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	2	37	
	Phthisis Pulmonalis.	2	3	2	2	4	5	..	..	..	1	..	1	1	1	3	..	3	1	..	..	29		
	Catarrhus Chronicus	..	2	..	..	..	..	..	2	1	..	..	..	..	..	..	..	..	1	..	..	6		
Diseases of the Liver.	Hepatitis Acuta .	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	8	
	„ Chronica .	..	..	..	..	..	2	..	2	..	..	..	..	..	..	..	1	..	..	..	..	5		
	Icterus .	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..	2		
Diseases of the Stomach and Bowels.	Peritonitis .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	30	
	Dysenteria Acuta .	..	..	..	..	1	..	3	..	4	..	..	..	..	..	..	..	1	1	..	..	10		
	„ Chronica.	..	..	..	..	..	..	..	2	2	..	..	..	1	..	1	1	3	..	..	..	10		
	Colica .	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	2		
Diseases of the Brain.	Diarrhoea .	..	1	3	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	12	
	Apoplexia .	..	..	..	2	..	..	2	1	..	..	..	..	..	..	..	..	..	..	..	..	5		
	Paralysis .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	2		
	Epilepsia .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	2		
	Delirium Tremens .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	1	..	3		
Dropsies.	Ascites .	..	..	..	1	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	3	3	
All other Diseases.	Vulnus .	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	7	
	Contusio .	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1		
	Ambustio .	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1		
	Fractura .	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2		
	Cynanche Tonsillar.	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1		
	Debilitas .	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1		
Total .		10	10	86	15	59	57	26	25	94	22	44	5	22	42	8	5	10	22	9	2	573	573	

Showing the Deaths among the WHITE TROOPS and BLACK PIONEERS at FORT AUGUSTA, from 1817 to 1836 inclusive, with a Specification of the Diseases by which they were caused.

Classes of Diseases.	Years	Strength	Specific Diseases.	1817	1818	1819	1820	1821	1822	1823	1824	1825	1826	1827	1828	1829	1830	1831	1832	1833	1834	1835	1836	Total from 1817 to 1836.	
				*440	518	300	325	384	369	476	527	368	494	526	439	369	642	403	165	233	313	213	282	Aggregate Strength 7,786	
																								Total by each Disease.	Total by each Class of Diseases.
Fevers.	Febris Intermittens.			1	..	27	21	9	11	9	39	†13	24	†146	34	21	19	26	2	5	4	13	7	431	433
	,, Remittens.			..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
	,, Cont. Com.			..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	
Diseases of the Lungs.	Pneumonia . . .			1	2	1	2	1	..	1	..	..	..	..	1	1	..	..	..	..	..	..	..	10	75
	Hæmoptysis . . .			..	..	..	1	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	3	
	Phthisis Pulmonalis			8	4	2	3	3	2	2	..	2	2	..	1	2	4	4	1	2	9	2	4	57	
	Catarrhus Acutus . . .			..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	2	
	,, Chronicus . . .			..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	2	
Diseases of the Liver.	Dyspnœa . . .			..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2
	Hepatitis Chronica . . .			..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	2	
Diseases of the Stomach and Bowels.	Hæmatemesis . . .			..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	2	..	..	1	1	26
	Dysenteria Acuta . . .			..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	
	,, Chronica . . .			2	3	..	..	..	2	1	2	1	..	..	..	..	1	1	..	2	..	..	..	15	
	Dyspepsia . . .			..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	
	Diarrhœa . . .			..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	1	4	
Diseases of the Brain.	Obstipatio . . .			..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	10
	Phrenitis . . .			..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	
	Apoplexia . . .			..	..	..	..	..	2	..	..	1	1	..	..	..	2	..	..	..	..	..	..	6	
	Epilepsia . . .			..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	
	Delirium Tremens . . .			..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	2	
Dropsies.	Anasarca . . .			1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	5
	Ascites . . .			..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	3	
	Hydrothorax . . .			..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	
All other Diseases.	Tetanus . . .			..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	2	21
	Atrophia . . .			..	3	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	4	
	Morbus Coxarius . . .			..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	2	
	Vulnus . . .			..	..	..	1	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	2	
	Morbi Varii ‡ . . .			2	1	1	..	1	1	..	..	1	1	..	..	1	..	..	..	..	1	..	1	11	
Total . .				15	17	31	30	17	19	15	43	21	30	147	37	26	27	32	4	13	116	15	17	572	572

\* The greater proportion of the garrison, in 1817, consisted of Black Troops.  
† The deaths by fever, in 1825, were stated in the Medical Returns at 69, but of these we have traced that no less than 56 occurred among the two companies at Kingston, whose sick were sent to Fort Augusta for Treatment. There are many more of the same description in the other years prior to 1832, but not being able to trace them with equal accuracy, we have been obliged to include them. It may be estimated that nearly one-half of the fever cases stated above have originated at Kingston.  
‡ Of the 146 deaths stated in 1827, 103 took place at Airey Castle Camp, to which the troops were removed from Fort Augusta on the breaking out of the Epidemic, but the cases all originated in the Fort.  
§ Under Morbi Varii are included Rheumatismus 1; Abscessus 1; Cystitis 1; Erysipelas 1; Scrophula 1; Hernia 1; Sarcocœle 1; Aneurisma 1; Fractura 1; Fistula 1; Debilitas 1.  
|| Fifteen deaths have been deducted in 1834, as having occurred among the sick of a detachment sent to Lacovia who died immediately after their return to the Fort.

ABSTRACT No. XVII. OF APPENDIX.

Showing the Deaths among the WHITE TROOPS and BLACK PIONEERS at SPANISH TOWN, from 1817 to 1836 inclusive, with a Specification of the Diseases by which they were occasioned.

Classes of Diseases.	Years	Strength	Specific Diseases.	1817	1818	1819	1820	1821	1822	1823	1824	1825	1826	1827	1828	1829	1830	1831	1832	1833	1834	1835	1836	Total from 1817 to 1836.	
				352	262	352	318	450	433	275	290	361	269	371	364	389	363	297	353	403	309	258	250	Aggregate Strength 6,719	
																								Total by each Disease.	Total by each Class of Diseases.
Fevers.	Febris Remittens . . .	39	69	18	81	38	96	53	54	133	46	52	26	17	41	59	18	2	3	37	28	910	948		
	„ Cont. Com. . .	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15	20	1	1	38			
Diseases of the Lungs.	Pneumonia . . .	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	2	61	
	Hæmoptysis . . .	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	3		
	Phthisis Pulmonalis	1	1	4	5	3	..	..	2	4	1	3	2	..	1	4	1	3	14	4	..	..	53		
	Catarrhus Acutus . . .	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1		
Diseases of the Liver.	„ Chronicus . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	2	2
	Hepatitis Chronica . . .	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	2		
Diseases of the Stomach and Bowels.	Enteritis . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	32
	Hæmatemesis . . .	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
	Dysenteria Acuta . . .	..	..	..	1	..	4	..	..	3	..	..	..	..	..	..	1	..	1	1	1	..	12		
	„ Chronica . . .	2	..	..	..	..	..	..	2	1	..	..	..	..	..	..	2	..	2	..	..	..	9		
	Dyspepsia . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1		
	Diarrhœa . . .	..	..	2	..	..	..	..	..	..	1	..	..	2	..	..	..	..	..	..	..	1	6		
Diseases of the Brain.	Cholera . . .	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	2	25	
	Apoplexia . . .	1	..	..	..	..	1	1	..	..	..	1	..	..	..	..	..	2	2	1	..	..	9		
	Epilepsia . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	2		
	Delirium Tremens . . .	..	..	..	..	..	..	..	..	..	..	..	2	..	..	1	..	..	1	3	6	1	14		
Dropsies.	Anasarca . . .	1	1	..	..	..	..	..	1	..	..	..	..	..	1	1	..	..	..	..	..	..	..	5	11
	Ascites . . .	..	..	..	..	..	..	..	..	1	1	2	..	..	..	..	..	..	1	..	..	1	6		
All other Diseases.	Ulcus . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	12	
	Contusio . . .	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	2		
	Tetanus . . .	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	..	..	1	..	..	2		
	Atrophia . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	2	4			
	Aneurisma . . .	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1		
	Hernia . . .	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1		
Erysipelas . . .				..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1			
Total . .				45	73	24	87	41	105	55	60	144	50	61	30	20	45	70	20	27	48	50	36	1091	1091

howing the Deaths among the WHITE TROOPS and BLACK PIONEERS at STONEY HILL, from 1817 to 1836 inclusive, with a Specification of the Diseases by which they were caused.

Classes of Diseases.	Years Specific Diseases.	1817	1818	1819	1820	1821	1822	1823	1824	1825	1826	1827	1828	1829	1830	1831	1832	1833	1834	1835	1836	Total from 1817 to 1836		
		Strength	422	296	239	140	400	528	516	471	413	439	477	353	378	342	230	194	350	316	356	383	Aggregate Strength 7,243	
																							Total by each Disease.	Total by each Class of Diseases.
Fevers.	Febris Intermittens . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	510	
	,, Remittens . . .	18	4	61	5	9	17	5	7	178	2	132	10	3	2	34	2	1	6	3	..	499		4
	,, Cont. Com. . .	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	8	..	..	..	1	10		1
Diseases of the Lungs.	Hæmoptysis . . .	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	47	
	Phthisis Pulmonalis . . .	6	1	4	..	2	2	1	..	4	2	1	1	2	1	1	1	7	1	5	2	44		2
	Catarrhus Chronicus . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2		1
Diseases of the Liver.	Hepatitis Acuta . . .	..	..	..	..	2	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	4	14	
	,, Chronica . . .	5	..	2	..	1	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	10		1
Diseases of the Stomach and Bowels.	Gastritis . . .	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	42	
	Enteritis . . .	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	2		3
	Dysentæria Acuta . . .	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	2	..	..	..	27		1
	,, Chronica . . .	9	4	1	1	1	1	2	2	2	..	2	..	..	..	..	..	..	1	1	..	1		1
	Colica . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6		1
	Diarrhœa . . .	..	..	2	1	..	1	..	..	..	..	..	2	..	..	..	..	..	..	..	..	1		1
	Cholera . . .	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1		1
Diseases of the Brain.	Hæmatemesis . . .	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	9	
	Ictus Solis . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1		3
	Apoplexia . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	1	..	..	1		1
	Epilepsia . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1		1
	Amentia . . .	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1		3
Dropsies.	Delirium Tremens . . .	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	1	..	..	..	..	..	14	
	Anasarca . . .	..	..	1	..	..	2	..	1	..	..	..	..	..	..	..	..	..	1	..	..	5		8
	Ascites . . .	2	..	..	..	..	1	..	2	1	..	..	..	..	..	1	..	1	..	..	..	1		1
All other Diseases.	Hydrothorax . . .	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	17	
	Rheum. Chronicus . . .	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	2		
	Syphilis Consecutiva . . .	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1		1
	Abscessus . . .	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1		1
	Ulcus . . .	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	2		2
	Vulnus . . .	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2		2
	Contusio . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	2		2
	Fractura . . .	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1		1
	Cynanche Tonsillaris . . .	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2		2
	Tetanus . . .	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1		1
	Scrophula . . .	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1		1
	Vermes . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1		1
	Otitis . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1		1
Total . . .		41	11	72	7	18	25	13	14	187	8	137	13	5	6	40	14	11	11	12	8	653	653	

ABSTRACT No. XIX. OF APPENDIX.

howing the Deaths among the WHITE TROOPS and BLACK PIONEERS at PORT ANTONIO, from 1817 to 1836, with a Specification of the Diseases by which they were caused.

Classes of Diseases.	Years Specific Diseases.	1817	1818	1819	1820	1821	1822	1823	1824	1825	1826	1827	1828	1829	1830	1831	1832	1833	1834	1835	1836	Total from 1817 to 1836		
		Strength	177	135	130	143	82	194	79	108	None	None	127-32	129	133	155	161	157	164	185	154	160	Aggregate Strength 2,478	
		Total by each Disease.																				Total by each Class of Disease.		
Fevers.	Febris Intermittens . . .	..	..	..	..	..	1	..	..	..	..	..	..	2	..	1	..	..	..	..	..	4	312	
	„ Remittens . . .	24	9	41	5	13	7	4	21	..	..	3	18	23	18	19	24	31	31	14	2	307		
	„ Cont. Com. . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1		
Diseases of the Lungs.	Hæmoptysis . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	13	
	Phthisis Pulmonalis . . .	..	1	2	2	1	1	..	..	..	..	..	..	2	..	..	2	..	..	..	1	12		
Diseases of the Liver.	Hepatitis Chronica . . .	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	3	3	
	Gastritis . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	17	
Diseases of the Stomach and Bowels.	Dysentæria Acuta . . .	..	..	..	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	5		
	„ Chronica . . .	1	..	..	1	2	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	6		
	Colica . . .	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	1		
	Diarrhœa . . .	2	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3		
Diseases of the Brain.	Cholera . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	7	
	Apoplexia . . .	1	..	1	..	..	..	..	..	..	..	..	2	..	..	..	..	2	..	1	..	7		
Dropsies.	Anasarca . . .	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	6	
	Ascites . . .	1	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	4		
	Hydrothorax . . .	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1		
All other Diseases.	Contusio . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	1	3	12	
	Ulcus . . .	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3		
	Carditis . . .	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1		
	Atrophia . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	2		
	Scrophula . . .	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1		
	Debilitas . . .	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2		
Total . . .		34	12	45	12	18	10	4	21	..	..	3	19	31	21	20	29	37	32	18	4	370	370	

Showing the Deaths among the WHITE TROOPS and BLACK PIONEERS at FALMOUTH, from 1817 to 1836 inclusive, with a Specification the Diseases by which they were caused.

Classes of Diseases.	Years	1817	1818	1819	1820	1821	1822	1823	1824	1825	1826	1827	1828	1829	1830	1831	1832	1833	1834	1835	1836	Total from 1817 to 1836	Aggregate Strength 3,688	Total by each Disease.	Total by each Class of Disease.
		Strength	121	134	123	120	113	223	165	192	174	119	176	165	178	245	208	212	372	294	263	291			
		Specific Diseases.																							
Fevers.	Febris Intermittens . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	2	311	311	
	,, Remittens . . .	4	8	15	22	3	23	3	5	30	25	39	7	3	19	45	14	22	10	3	1	301			
	,, Cont. Com. . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	..	8			
Diseases of the Lungs.	Pneumonia . . .	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	2	..	3	34	34	
	Phthisis Pulmonalis . . .	2	..	1	..	2	3	..	3	..	..	1	2	1	1	3	..	..	6	..	2	27			
	Catarrhus Acutus . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1			
	,, Chronicus . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	2			
Dyspnœa. . .		..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	6	6	
		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	1			
Diseases of the Liver.	Hepatitis Acuta . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	10	10	
	,, Chronica . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	1	..	1	4			
	Icterus . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1			1
Diseases of the Stomach and Bowels.	Hæmatemesis . . .	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	19	19	
	Dysentæria Acuta . . .	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	2	1	..	4			
	,, Chronica . . .	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	1	..	4			
Diarrhœa . . .		1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	159	159	
		..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	2			
Diseases of the Brain.	Phrenitis . . .	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	2	19	19	
	Apoplexia . . .	..	..	..	..	1	..	1	..	..	..	1	..	3	..	..	..	..	..	1	1	8			
	Epilepsia . . .	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	2	..	..	..	3			
	Delirium Tremens . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	2	1	5	5			
	Paralysis . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1			
Dropsies.	Anasarca . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	2	..	..	4	10	10	
	Ascites . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	2	..	2	5			
	Hydrothorax . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1			
All other Diseases.	Abscessus . . .	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	9	9	
	Tetanus . . .	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	2			
	Atrophia . . .	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	1			
	Hæmorrhœis . . .	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1			
	Aneurisma . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	2			
	Amputatio . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1			
Debilitas . . .	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	399	399		
Total . . .	9	9	16	23	6	26	4	10	32	27	41	10	9	21	53	16	26	28	22	11					

ABSTRACT No. XXI. OF APPENDIX.

Showing the Deaths among the WHITE TROOPS and BLACK PIONEERS at MONTEGO BAY, for the undermentioned periods, with a Specification of the Diseases by which they were caused.

Classes of Diseases.	Years .	1817	1818	1819	1820	1821	1822	1823	1824	1825	1826	1827	1828	1829	1830	1831	1832	1833	1834	1835	1836	Total for 11 Years	
		90	23				39		23*					66	46			123	144	132	111	92	Aggregate Strength 889
		Specific Diseases.																					Total by each Disease.
Fevers.	{	Febris Intermittens	1	..	No Troops permanently at Station. Parties occasionally sent from Maroon Town when wanted.		..		..				..	..			..	1	..	..	..	2	
		,, Remittens .	4	..			2		4		14	5		37	19	11	2	30	128				
		,, Cont. Com..	..	1			..		..		..	..		..	..	..	2	1	4				
Diseases of the Lungs.	{	Hæmoptysis . .	..	1		..		..	..			..	..				..	1	..	..	2		
		Phthisis Pulmonalis	..	..		..	..	..	..	..	..	..	2	1	2	..	..	5					
Diseases of the Stomach and Bowels.	{	Gastritis . . .	..	..		..		..	..				..	..			..	1	..	..	1		
		Dysentæria Chronica	..	..		..	..	..	..	1	..	..	..	1	..	1	..	2					
		Diarrhœa . . .	..	..		..	..	..	..	..	..	..	..	..	..	..	..	1					
		Obstipatio . . .	1	..		..	..	..	..	..	..	..	..	..	..	..	..	1					
Diseases of the Brain.	{	Apoplexia . . .	..	..		..		..	..				..	..			4	..	..	..	4		
		Paralysis . . .	..	..		..	..	..	..	..	..	..	..	..	1	..	1						
		Delirium Tremens	..	..		..	..	..	..	..	..	..	..	1	1	..	1	3					
		Ictus Solis . . .	..	..		..	..	..	1	..	..	..	..	..	..	..	..	1					
Dropsies.		Ascites . . .	..	..		..		..	..			..	..			..	..	1	..	..	1		
		Ulcer . . .	..	..		..	..	..	..	..	..	..	..	..	1	..	..	1					
All other Diseases.		Debilitas . . .	2	..		..		..	..				..	..			..	..	..	..	2		
		Total . . .	8	2		..	..	2	..	5	..	..	..	14	5	..	..	44	25	16	6	32	159

\* The Strength in 1824 was 46 men ; but they remained only half-a-year, which is equivalent to 23 men stationed there for a whole year.

Showing the Deaths among the WHITE TROOPS and BLACK PIONEERS at MAROON TOWN, from 1817 to 1836 inclusive, with a Specification of the Diseases by which they were caused.

Classes of Diseases.	Years Strength Specific Diseases.	1817	1818	1819	1820	1821	1822	1823	1824	1825	1826	1827	1828	1829	1830	1831	1832	1833	1834	1835	1836	Total from 1817 to 1836	
		99	101	82	68	77	198	259	237	198	241	234	172	194	240	271	164	185	247	250	280	Aggregate Strength 3,797	
																						Total by each Disease.	Total by each Class of Diseases.
Fevers.	Febris Intermittens . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	58
	„ Remittens . . .	..	..	..	1	..	3	6	8	4	3	2	3	2	7	6	4	5	2	..	1	57	
Diseases of the Lungs.	Pneumonia . . .	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	24	
	Hæmoptysis . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..		1
	Phthisis Pulmonalis . . .	..	..	1	1	..	..	1	1	1	1	..	1	1	3	..	..	..	..	..	2		13
	Catarrhus Chronicus . . .	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	2	3	..	..	..		7
Diseases of the Liver.	Asthma . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	1
	Icterus . . .	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
Diseases of the Stomach and Bowels.	Enteritis . . .	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	..	2	14
	Dysentæria Acuta . . .	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	2	..	..	..	4	
	„ Chronica . . .	..	1	..	..	..	..	1	..	..	..	3	..	..	1	..	1	..	..	..	..	7	
Diseases of the Brain.	Dyspepsia . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	5
	Apoplexia . . .	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..	3	
Dropsies.	Epilepsia . . .	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	9
	Delirium Tremens . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	
	Anasarca . . .	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	2	1	..	..	..	5	
All other Diseases.	Ascites . . .	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	3	13
	Hydrothorax . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	
	Rheumatismus . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	2	
	Phlegm. et Abscessus . . .	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	1	3	
	Ulcus . . .	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	2	
	Vulnus . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	2	
	Tetanus . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	
Total . . .	Convulsio . . .	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	124
	Debilitas . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	2	
Total . . .		..	1	1	2	2	6	9	9	6	5	7	7	3	14	13	11	15	4	1	8	124	124

ABSTRACT No. XXIII. OF APPENDIX.

Showing the Deaths among the WHITE TROOPS and BLACK PIONEERS at LUCEA, from 1817 to 1836 inclusive, with a Specification of the Diseases by which they were caused.

Classes of Diseases.	Years Strength Specific Diseases.	1817	1818	1819	1820	1821	1822	1823	1824	1825	1826	1827	1828	1829	1830	1831	1832	1833	1834	1835	1836	Total from 1817 to 1836.	
		70	63	63	67	73	92	92	109	90	47	99	84	96	80	..	96	85	76	119	75	Aggregate Strength 1,566	
																						Total by each Disease.	Total by each Class of Diseases.
Fevers.	Febris Intermittens . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	99
	,, Remittens . . .	5	3	4	2	1	5	4	4	13	..	2	..	1	26	..	15	2	2	1	8	98	
Diseases of the Lungs.	Pneumonia . . .	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	16
	Hæmoptysis . . .	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	
	Phthisis Pulmonalis . . .	..	..	..	1	1	..	1	2	..	1	1	..	2	1	..	..	..	..	1	2	13	
	Catarrhus Chronicus . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	
Diseases of the Liver.	Hepatitis Acuta . . .	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
Diseases of the Stomach and Bowels.	Hæmatemesis . . .	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	7
	Dysentæria Acuta . . .	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	2	
	Diarrhoea . . .	..	..	..	..	..	1	..	..	..	1	..	..	..	1	..	..	..	1	..	..	4	
Diseases of the Brain.	Apoplexia . . .	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	3
	Paralysis . . .	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	
	Delirium Tremens . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	
Dropsies.	Anasarca . . .	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	2	3
	Ascites . . .	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
All other Diseases.	Fractura . . .	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	4
	Atrophia . . .	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	3	
Total . . .		5	6	5	3	3	7	8	7	16	2	3	1	3	28	..	16	3	2	3	12	133	133



Showing the Number Sick in Hospital of the Troops serving in the WINDWARD AND LEEWARD COMMAND on the Muster Day of each Month, from 1817 to 1836 inclusive.

I. WHITE TROOPS.

MONTHS.	1817	1818	1819	1820	1821	1822	1823	1824	1825	1826	1827	1828	1829	1830	1831	1832	1833	1834	1835	1836	Aggregate Sick.	Average Sick in each Month.
January.	830	541	468	247	304	220	319	215	307	293	337	424	385	390	399	311	299	382	467	374	7512	376
February	812	563	313	253	269	230	333	196	357	324	332	426	381	352	342	339	332	369	496	356	7375	369
March	683	572	366	236	288	215	364	217	330	292	334	478	352	341	327	355	333	403	435	392	7363	368
April	665	555	305	188	293	198	372	240	373	369	399	441	387	323	387	323	430	462	428	411	7549	378
May	743	578	239	172	249	201	376	306	422	293	451	463	333	301	422	321	475	417	405	372	7539	377
June	660	514	261	218	322	236	444	335	347	402	448	335	303	343	419	421	592	444	481	468	8023	377
July	687	515	257	235	339	267	422	308	341	376	507	417	313	372	383	465	509	437	410	447	8007	410
August	679	667	275	237	339	298	456	203	347	369	455	428	309	487	395	396	451	479	405	459	8134	407
September	670	516	312	295	301	247	290	213	342	409	411	400	364	470	324	383	408	467	392	500	7714	345
October	624	409	257	253	242	233	329	225	289	345	448	352	342	441	385	369	374	450	389	566	7322	366
November	569	464	292	319	241	215	317	231	289	272	458	350	295	434	277	362	339	390	391	524	7020	371
December	487	582	263	317	211	207	289	269	294	331	382	332	313	370	303	302	327	480	389	512	6960	348
Total	8109	6476	3608	2970	3398	2765	4311	2958	4038	4075	4962	4846	4077	4624	4393	4317	4910	5180	5088	5381	90518	4526
Average	676	540	301	247	283	230	360	246	336	340	413	404	339	385	366	362	409	432	424	448	7543	377

II. BLACK TROOPS, NOT INCLUDING PIONEERS.

MONTHS.	1817	1818	1819	1820	1821	1822	1823	1824	1825	1826	1827	1828	1829	1830	1831	1832	1833	1834	1835	1836	Aggregate Sick.	Average Sick in each Month.
January.	217	47	60	49	44	40	45	24	45	28	9	25	46	28	27	29	20	27	35	18	863	43
February	257	47	48	37	31	39	39	40	20	14	12	24	29	22	26	25	23	34	34	26	827	41
March	230	44	68	55	33	45	43	35	24	13	7	20	49	23	22	21	26	38	43	27	866	43
April	222	41	90	33	44	34	35	26	19	12	13	19	30	22	17	27	33	26	37	20	800	40
May	233	51	87	32	42	31	50	27	22	12	17	27	24	26	17	29	32	32	31	26	848	42
June	232	49	85	34	28	40	68	33	18	15	23	21	34	29	16	22	34	38	31	27	877	41
July	237	54	52	53	38	53	80	31	14	11	20	20	29	23	18	19	38	31	36	22	879	44
August	155	65	50	34	41	53	55	31	21	15	26	25	30	25	30	20	39	39	33	25	812	41
September	62	63	59	39	41	38	36	34	19	11	36	22	48	24	29	20	28	39	32	24	704	35
October	76	74	64	44	43	42	42	27	21	11	19	24	54	23	37	23	30	41	36	22	753	38
November	64	57	53	44	44	40	29	37	23	16	27	30	66	25	22	31	24	37	39	20	728	36
December	57	60	71	33	37	41	34	40	19	11	23	24	29	20	20	28	25	35	33	20	660	33
Total	2042	652	787	487	466	496	556	385	265	169	232	281	468	290	281	294	352	417	420	277	9617	451
Average	170	54	66	41	39	41	46	32	22	14	19	23	39	24	23	24	29	35	35	23	801	40

Showing the Number Sick in Hospital of the WHITE TROOPS serving in the ISLAND OF JAMAICA on the Muster Day of each Month, from 1819 to 1836 inclusive.

MONTHS.	1819	1820	1821	1822	1823	1824	1825	1826	1827	1828	1829	1830	1831	1832	1833	1834	1835	1836	Aggregate Sick.	Average Sick in each Month.
January.	128	152	184	202	180	205	233	177	122	117	153	155	150	118	214	272	168	173	3103	172
February	83	154	203	152	168	196	192	128	122	73	128	152	114	89	192	257	171	143	2717	151
March	137	122	195	166	150	154	207	102	234	75	135	131	95	102	146	249	163	140	2709	150
April	107	106	167	162	134	174	149	105	237	109	128	108	111	106	132	197	186	144	2562	142
May	109	124	183	178	125	191	142	107	236	158	159	123	68	109	121	218	163	177	2681	149
June	132	171	199	173	138	168	174	119	194	135	162	127	93	114	159	197	215	166	2836	157
July	114	177	165	130	139	200	266	108	251	97	161	106	122	149	211	213	148	164	2921	162
August	185	169	131	112	131	222	238	73	267	73	140	127	144	170	170	163	147	152	2814	156
September	241	167	132	136	141	182	180	61	273	126	137	113	184	127	280	220	190	141	3031	168
October	218	172	187	138	135	202	217	62	292	129	130	142	182	95	276	181	158	153	3069	170
November	171	230	211	149	167	183	286	82	240	153	150	180	211	119	266	199	163	163	3323	185
December	156	180	231	163	183	192	229	131	194	149	119	150	167	163	280	198	130	146	3161	176
Total	1781	1914	2188	1861	1791	2259	2513	1255	2662	1394	1703	1614	1641	1461	2447	2564	2007	1862	34927	1940
Average	148	160	182	155	149	188	209	105	222	116	142	134	137	122	204	214	167	155	2910	162

In Regard to the Black Troops and Pioneers the Returns furnish no details.

to 1836 inclusive.

Classes of Diseases.	Years . Strength Specific Diseases.	1817		1832		1833		1834		1835		1836		From 1817 to 1836				
		13		20		20		18		18		24		Aggregate Strength 535				
		Adm. Died.		Adm. Died.		Adm. Died.		Adm. Died.		Adm. Died.		Adm. Died.		Admitted.		Died.		
														By each Disease.	By each Class of Diseases.	By each Disease.	By each Class of Diseases.	
Fevers.	Febris Intermittens . . .	..	..	3	2	..	..	..	..	..	..	..	..	103	506	..	85	
	„ Remittens . . .	2	2	213	2	12	..	7	..	5	..	13	..	389		81		
	„ Cont. Com. . .	..	..	..	..	..	..	..	..	..	..	..	..	14		4		
Diseases of the Lungs.	Pneumonia . . .	..	..	1	..	..	..	..	..	1	1	..	..	3	15	2	3	
	Phthisis Pulmon. . .	..	..	..	..	..	..	..	..	..	..	2	..	4		1		
	Catarrhus . . .	..	..	1	..	..	..	..	..	..	..	1	..	7		..		
	Asthma . . .	..	..	..	..	..	..	..	..	..	..	..	..	1		..		
Diseases of the Liver.	Hepatitis . . .	..	..	..	..	..	..	..	..	..	..	..	..	4	5	1	1	
	Icterus . . .	..	..	..	..	..	..	..	..	..	..	..	..	1		..		
Diseases of the Stomach and Bowels.	Dysentery . . .	..	..	1	1	..	..	2	..	..	..	1	..	38	82	7	7	
	Dyspepsia . . .	..	..	..	..	..	..	..	..	..	..	..	..	27		..		
	Colica . . .	..	..	..	..	..	..	1	..	..	..	..	..	1		..		
	Diarrhœa . . .	..	..	1	..	1	..	..	..	..	..	2	..	14		..		
	Obstipatio . . .	..	..	..	..	..	..	..	..	..	..	..	..	2		..		
Diseases of the Brain.	Phrenitis . . .	..	..	..	..	..	..	..	..	..	..	..	..	1	9	1	3	
	Cephalagia . . .	..	..	..	..	..	..	..	..	..	..	..	..	2		..		
	Apoplexia . . .	..	..	..	..	..	..	..	..	..	..	..	..	1		1		
	Epilepsia . . .	..	..	..	..	..	..	..	..	..	..	..	..	2		..		
	Mania . . .	..	..	..	..	1	..	..	..	..	..	..	..	1		..		
	Delirium Tremens . . .	..	..	..	..	..	..	1	..	..	..	1	1	2		1		
Dropsies.	Anasarca . . .	..	..	2	..	..	..	..	..	..	..	..	..	6	7	2	3	
	Ascites . . .	..	..	..	..	..	..	..	..	..	..	..	..	1		1		
Rheumatic Affections.	Rheumatismus . . .	..	..	..	..	..	..	1	..	..	..	..	..	7	7	..	..	
Venereal Affections.	Syphilis . . .	1	..	..	..	..	..	..	..	..	..	1	..	4	23	..	..	
	Ulcus Penis non Syph. . .	..	..	..	..	..	..	..	..	..	..	..	..	2		..		
	Gonorrhœa . . .	..	..	2	..	..	..	..	..	..	..	2	..	15		..		
	Hernia Humoralis . . .	..	..	..	..	..	..	..	..	..	..	..	..	2		..		
Abscesses and Ulcers.	Phlegmon et Abscess. . .	..	..	..	..	..	..	..	..	..	..	..	..	6	31	..	..	
	Ulcus . . .	4	..	2	..	..	..	2	..	1	..	..	..	25		..		
Wounds and Injuries.	Subluxatio . . .	..	..	1	..	1	..	..	..	..	..	2	..	10	33	..	..	
	Vulnus . . .	..	..	1	..	..	..	..	..	..	..	1	..	4		..		
	Contusio . . .	..	..	1	..	..	..	..	..	..	..	..	..	12		..		
	Ambustio . . .	..	..	1	..	..	..	..	..	..	..	..	..	4		..		
	Fractura . . .	..	..	..	..	..	..	..	..	..	..	..	..	3		..		
Punished.	Punitus . . .	1	..	1	1	..	..	..	..	..	..	..	..	26	26	..	..	
Diseases of the Eyes.	Morbi Oculorum . . .	..	..	..	..	3	..	..	..	..	..	..	..	4	4	..	..	
Diseases of the Skin.	Morbi Cutis . . .	..	..	..	..	..	..	..	..	..	..	..	..	4	4	..	..	
All other Diseases.	Splenitis . . .	..	..	..	..	..	..	..	..	..	..	..	..	5	13	..	..	
	Erysipelas . . .	..	..	..	..	..	..	..	..	..	..	..	..	1				
	Hydarthrus . . .	..	..	..	..	..	..	..	..	..	..	..	..	1				
	Sarcocele . . .	..	..	1	..	..	..	..	..	..	..	..	..	1				
	Physconia . . .	..	..	..	..	..	..	..	..	..	..	..	..	1				
	Scrophula . . .	..	..	..	..	..	..	..	..	..	..	..	..	1				
	Dysuria . . .	..	..	..	..	..	..	..	..	..	..	..	..	1				
	Tumores . . .	..	..	..	..	1	..	..	..	..	..	..	..	1				
	Dracunculus . . .	..	..	..	..	..	..	..	..	..	..	..	..	1				
Omitted in Medical Returns.	Supposed to have been from accidents, sudden deaths, or on detachments . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	5	5		
Total by War Office and Medical Returns . . .		8	2	14	25	3	19	..	14	..	7	1	26	1	765	765	107	107

troops in the Bahamas—(continued.)

Class of Disease	1828		1829		1830		1831		1832		1833		1834		1835		1836		From 1817 to 1836			
	480		571		578		478		549		520		508		524		496		Aggregate Strength 7102			
	Adm. Died.		Adm. Died.		Adm. Died.		Adm. Died.		Adm. Died.		Adm. Died.		Adm. Died.		Adm. Died.		Adm. Died.		Admitted.		Died.	
	By each Disease.	By each Class of Diseases.	By each Disease.	By each Class of Diseases.	By each Disease.	By each Class of Diseases.	By each Disease.	By each Class of Diseases.	By each Disease.	By each Class of Diseases.	By each Disease.	By each Class of Diseases.	By each Disease.	By each Class of Diseases.	By each Disease.	By each Class of Diseases.	By each Disease.	By each Class of Diseases.	By each Disease.	By each Class of Diseases.	By each Disease.	By each Class of Diseases.
Fever	160	5	247	3	171	1	183	3	207	5	221	5	247	4	174	1	208	7	122	122	38	40
Eruptive	61	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	65	65	1	12
Diseases of Lung	19	1	25	1	3	..	11	2	8	..	..	..	4	..	22	3	28	3	174	2	14	69
Diseases of Liver	3	3	3	3	5	3	7	6	5	4	3	3	7	5	2	2	1	..	64	622	49	..
Diseases of Stomach and Bowels	4	..	39	..	92	..	18	..	20	..	8	..	12	..	20	..	9	..	344	2	2	..
Diseases of Brain	2	..	1	..	..	..	8	..	6	..	3	..	2	..	4	..	7	1	35	5	1	1
Dropsy	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	1	6	..	..
Rheumatism	..	..	..	..	2	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
Venerical Diseases	31	3	35	1	55	2	53	3	27	3	20	1	40	4	66	12	32	1	468	5	2	46
Abscesses	9	1	3	..	1	..	..	..	1	..	4	..	6	..	3	..	3	..	69	821	2	..
Ulcers	8	..	1	1	..	..	3	..	2	..	9	..	16	..	15	1	34	2	39	..	7	..
Wounds and Injuries	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	11	..	..	..
Punishable Diseases	1	1	..	..	..	..	..	..	1	..	..	..	1	1	..	..	..	..	3	33	5	13
Eye Diseases	..	..	..	..	1	..	..	..	1	1	..	..	2	2	1	..	1	..	10	..	2	..
Skin Diseases	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	..	4	..
Other Diseases	6	..	1	..	2	..	1	1	3	..	1	1	8	1	12	1	..	..	4	73	4	18
Amputations	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	17	..	3	..
Phlegmons	9	3	17	..	47	..	14	..	16	..	38	..	52	..	34	3	18	..	3	410	12	12
Varicella	2	..	1	..	2	..	6	..	..	..	..	..	..	..	..	..	..	..	11	..	..	..
Scabies	3	..	15	..	6	..	10	..	5	..	9	..	4	..	6	..	1	..	37	..	..	..
Other Skin Diseases	16	..	26	..	18	..	11	..	16	..	12	..	12	..	17	..	19	..	73	393	..	..
Other Diseases	6	..	4	..	1	..	5	..	5	..	4	..	2	..	8	..	7	..	48	..	..	..
Abscesses	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	2	..	4	..	..	..
Ulcers	40	1	23	..	57	..	20	..	21	..	25	1	12	..	40	1	30	..	372	1109	3	10
Wounds and Injuries	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	1	..
Punishable Diseases	71	1	76	..	66	..	44	..	53	..	35	..	63	..	36	3	21	..	733	..	5	..
Eye Diseases	..	..	..	..	..	..	..	..	1	..	1	1	1	..	..	..	..	..	3	..	1	..
Skin Diseases	2	..	4	..	1	..	5	..	5	..	3	..	4	..	1	..	3	..	46	..	2	..
Other Diseases	18	..	20	1	8	..	13	..	24	..	17	..	27	..	13	..	19	..	221	570	2	6
Amputations	13	..	27	1	29	..	21	..	16	..	14	..	10	..	23	..	26	..	280	..	2	..
Phlegmons	2	..	..	..	2	..	..	..	..	..	..	..	1	..	1	..	2	1	10	..	1	..
Varicella	..	..	..	..	..	..	4	..	1	..	..	..	1	..	1	..	2	1	10	..	..	..
Scabies	22	..	47	..	54	..	32	..	25	..	23	..	10	..	21	..	13	..	480	480	..	..
Other Skin Diseases	9	..	17	..	18	..	6	..	7	..	17	..	13	..	8	..	5	..	154	154	..	..
Other Diseases	56	..	16	..	4	..	10	..	1	..	1	..	4	..	6	..	5	..	253	253	..	..
Amputations	4	..	1	..	7	..	1	..	..	..	2	..	2	..	..	..	1	..	34	..	..	..
Phlegmons	1	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	1	..	15	..	..	..
Varicella	1	..	2	..	..	..	3	..	2	..	1	..	1	..	..	..	2	..	2	..	..	..
Scabies	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	14	..	..	..
Other Skin Diseases	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	3	..	1	..
Other Diseases	1	1	..	..	2	..	1	..	..	..	..	..	..	..	1	..	..	..	2	..	..	..
Amputations	..	..	..	..	1	..	..	..	..	..	3	..	..	..	..	..	..	..	12	..	..	..
Phlegmons	..	..	..	..	..	..	2	..	1	..	4	..	..	..	..	..	..	..	7	..	..	..
Varicella	1	..	..	..	..	..	1	..	1	..	..	..	..	..	1	..	1	..	8	..	..	..
Scabies	6	1	9	..	4	..	6	..	9	..	12	..	8	..	10	1	6	..	78	349	3	11
Other Skin Diseases	1	..	..	..	1	1	..	..	..	..	2	..	5	..	..	..	1	..	15	..	..	..
Other Diseases	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	2	..	..	..	
Amputations	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	20	..	25	..	..	..
Phlegmons	1	..	1	1	1	1	..	..	1	1	..	..	..	..	..	..	..	..	52	..	4	..
Varicella	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	1	..
Scabies	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..
Other Skin Diseases	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	67	..	..	..
Omitted in Medical Return	3	..	3	..	5	..	5	..	3	..	2	..	3	..	3	..	5	..	7	..	52	52
Total	588	24	729	29	697	15	503	18	500	16	503	15	583	22	559	34	542	26	7598	7598	290	290

menstruation, and 18 Paraphymosis; under Ischuria, 1 of Hæmaturia; under Morbi Cutis, 1 of Erysipelas, and all cases of Varicella.

Showing the Admissions into Hospital

II

Classes of Diseases.	Years	1822		1823		1824		1825		1826		1827	
		Strength		Strength		Strength		Strength		Strength		Strength	
		186		182		176		175		348		312	
		Adm.	Died.	Adm.	Died.	Adm.	Died.	Adm.	Died.	Adm.	Died.	Adm.	Died.
Fevers.	Febris Intermittens.	49	..	38	..	13	..	26	..	12	..	12	..
	,, Remittens.	4	..	7	..	9	1	10	..	6	..	1	..
	,, Cont. Com.	1	..	..	..	3	..	15	..	11	..	51	..
Diseases of the Lungs.	Pneumonia . . . .	9	..	1	..	6	1	6	..	9	1	..	..
	Pleuritis . . . . .	..	..	..	..	..	..	..	..	..	..	..	..
	Hæmoptysis . . . .	2	..	..	..	1	..	1	..	2	..	1	..
	Phthisis Pulmonalis	4	3	3	2	7	3	1	1	3	1	2	..
	Catarrhus . . . . .	1	..	1	..	6	..	6	..	39	..	14	..
Diseases of the Liver.	Asthma and Dyspnoea	3	1	..	..	..	..	1	..	..	..	1	..
	Hepatitis . . . . .	3	..	..	..	1	..	..	..	1	..	..	..
Diseases of the Stomach and Bowels.	Icterus . . . . .	..	..	..	..	..	..	..	..	2	..	..	..
	Peritonitis . . . .	..	..	..	..	..	..	..	..	..	..	..	..
Epidemic Cholera	Gastritis . . . . .	..	..	..	..	..	..	..	..	..	..	..	..
	Enteritis . . . . .	..	..	..	..	..	..	..	..	..	..	..	..
	Hæmatemesia . . . .	..	..	..	..	..	..	..	..	1	..	..	..
	Dysenteria . . . . .	1	..	3	1	..	..	3	1	6	1	..	..
	Dyspepsia . . . . .	..	..	..	..	5	..	1	..	..	..	1	..
	Colica . . . . .	1	..	..	..	2	..	5	..	1	..	2	..
	Obstipatio . . . . .	..	..	..	..	..	..	4	..	4	..	..	..
	Cholera Morbus.	..	..	..	..	..	..	1	..	..	..	..	..
Diseases of the Brain.	Diarrhoea . . . . .	3	..	2	..	..	..	13	..	34	..	1	..
	Cholera Epidemica .	..	..	..	..	..	..	..	..	..	..	..	..
Dropsies.	Apoplexia . . . . .	..	..	..	..	1	1	..	..	..	..	..	..
	Paralysis . . . . .	..	..	..	..	..	..	1	..	..	..	1	1
	Epilepsia . . . . .	..	..	..	..	..	..	..	..	3	1	..	..
	Amentia . . . . .	..	..	..	..	..	..	..	..	..	..	..	..
	Mania . . . . .	..	..	1	..	1	..	..	..	1	..	..	..
Rheumatic Affections.	Delirium Tremens .	..	..	..	..	..	..	..	..	..	..	..	..
	Anasarca . . . . .	..	..	..	..	..	..	..	..	..	..	..	..
Venereal Affections.	Ascites . . . . .	..	..	..	..	..	..	..	..	..	..	..	..
	Rheumatismus . . .	25	..	4	..	19	..	38	..	46	1	16	2
Abscesses and Ulcers.	Podagra . . . . .	..	..	..	..	..	..	..	..	2	..	..	..
	Syphilis . . . . .	..	..	..	..	1	..	..	..	2	..	..	..
	Ulcus Penis non Syph.	..	..	..	..	..	..	..	..	1	..	..	..
	Bubo Simplex . . . .	..	..	..	..	..	..	..	..	1	..	..	..
	Gonorrhoea . . . . .	..	..	..	..	..	..	1	..	4	..	3	..
Abscesses and Ulcers.	Hernia Humoralis .	2	..	..	..	..	..	..	..	..	..	..	..
	Stricture Urethrae .	..	..	..	..	..	..	..	..	..	..	..	..
Wounds and Injuries.	Phlegm. et Abscess.	6	..	..	..	..	..	4	..	2	..	14	..
	Paronychia . . . . .	1	..	..	..	1	..	..	..	2	..	..	..
	Fistula . . . . .	..	..	..	..	..	..	..	..	..	..	..	..
	Ulcus . . . . .	6	..	11	..	8	..	7	..	22	..	22	..
Punished.	Subluxatio . . . . .	..	..	..	..	..	..	..	..	5	..	2	..
	Vulnus . . . . .	11	..	11	..	12	1	10	..	21	..	18	..
	Contusio . . . . .	3	..	10	..	6	..	23	..	25	..	14	..
	Ambustio . . . . .	..	..	..	..	..	..	..	..	..	..	..	..
Diseases of the Eyes.	Fractura . . . . .	1	1	..	..	..	..	..	..	..	..	1	..
	Punitus . . . . .	5	..	5	..	6	..	3	..	26	..	31	..
	Morbi Oculorum . .	1	..	2	..	3	..	1	..	7	..	2	..
	Morbi Cutis . . . .	..	..	..	..	2	..	..	..	27	..	..	..
All other Diseases.	Cynanche Tonsillaris	1	..	..	..	3	..	2	..	2	..	2	..
	Nephritis . . . . .	..	..	..	..	..	..	..	..	1	..	..	..
	Otitis . . . . .	..	..	..	..	..	..	..	..	1	..	..	..
	Epistaxis . . . . .	..	..	..	..	..	..	..	..	..	..	..	..
	Hydrocele . . . . .	..	..	..	..	..	..	..	..	3	..	..	..
	Vermes . . . . .	..	..	..	..	..	..	..	..	1	..	..	..
	Scrophula . . . . .	..	..	..	..	..	..	..	..	3	..	2	..
	Ischuria et Dysuria .	2	..	..	..	..	..	..	..	..	..	..	..
	Varix . . . . .	..	..	..	..	1	..	..	..	..	..	..	..
	Tumores . . . . .	..	..	..	..	..	..	..	..	1	..	..	..
	Hernia . . . . .	1	..	..	..	..	..	..	..	3	..	1	..
	Prolapsus Ani . . . .	..	..	..	..	1	..	..	..	..	..	..	..
	Amputatio . . . . .	..	..	..	..	..	..	..	..	..	..	..	..
	Chigre . . . . .	..	..	..	..	..	..	..	..	..	..	..	..
	Dracunculus . . . . .	..	..	..	..	..	..	..	..	2	..	..	..
Omitted in Medical Returns.	Periostitis . . . . .	..	..	..	..	..	..	..	..	..	..	..	..
	Atrophia . . . . .	1	..	..	..	..	..	..	..	1	1	..	..
	Hæmorrhoids . . . .	..	..	..	..	..	..	..	..	..	..	..	..
	Supposed to have been from accidents, sudden deaths, or on detachments .	..	2	..	1	..	..	3	..	1	..	4	..
Total in War Office and Medical Returns . . . .		147	7	99	4	118	7	183	5	346	7	215	10



ABSTRACT No. XXVII. OF APPENDIX.

[29

Showing the AGES of the Troops composing the Service Companies of Corps stationed in the WINDWARD AND LEEWARD COMMAND, and the Deaths at each Age, from 1st January 1830 to 31st March 1837.

Corps.	Year.	Under 18 Years.		18 to 25.		25 to 33.		33 to 40.		40 to 50.		Total.	
		Strength	Died	Strength	Died	Strength	Died	Strength	Died	Strength	Died	Strength	Died
1st Foot.	Strength 1st Jan. 1830 .	3	..	257	24	175	12	100	5	12	..	547	41
19th "	Strength 1st Jan. "	1	..	286	4	256	10	23	1	3	1	569	16
" "	Transferred 1st Jan. "	..	..	..	..	1	..	4	..	1	..	6	..
25th "	Strength 1st Jan. "	2	..	131	12	166	12	121	3	18	3	438	30
" "	Draft joined 5th Feb. "	..	..	77	..	23	..	3	..	..	..	103	..
27th "	Strength 1st Jan. "	11	..	251	8	128	3	129	5	28	3	547	19
65th "	Strength 1st Jan. "	7	..	311	24	223	26	16	7	..	..	557	57
" "	Draft joined "	..	..	..	..	1	..	2	..	..	..	5	..
86th "	Strength 1st Jan. "	5	..	276	5	212	17	36	2	7	1	536	25
93d "	Strength 1st Jan. "	2	..	284	19	137	19	76	18	15	4	514	60
Total for 1830 .		31	..	1873	96	1322	99	510	41	86	12	3822	248
1st Foot.	Strength 1st Jan. 1831 .	3	..	230	19	158	16	93	6	11	..	495	41
" "	Draft joined 21st Jan. 1831	1	..	37	..	7	..	1	..	..	..	46	..
19th "	Strength 1st Jan. 1831	1	..	282	6	241	5	26	4	3	..	556	15
" "	Transferred 1st Jan. "	..	..	..	..	2	..	3	..	..	..	5	..
25th "	Strength 1st Jan. "	2	..	191	12	165	28	113	16	12	2	483	58
" "	Transferred 1st Jan. "	..	..	..	..	..	..	1	..	3	..	4	..
36th "	Strength 1st Jan. "	5	..	259	23	177	11	69	5	8	..	518	39
65th "	Strength 1st Jan. "	7	..	288	20	198	41	12	..	2	..	507	61
86th "	Strength 1st Jan. "	8	..	271	9	191	11	36	1	8	..	514	20
" "	Transferred 1st Jan. "	..	..	..	..	3	..	1	..	1	..	5	..
93d "	Strength 1st Jan. "	2	..	264	112	112	10	58	9	9	1	445	35
" "	Draft joined 20th Jan. 1831	..	..	29	7	7	..	2	..	..	..	38	..
Total for 1831 .		29	..	1851	104	1254	122	415	40	57	3	3616	269
1st Foot.	Strength 1st Jan. 1832 .	1	..	256	16	140	15	83	6	6	..	486	37
" "	(Drafts joined 15th Feb. and March 1832 .)	1	..	24	4	4	..	2	..	..	..	31	..
19th "	Strength 1st Jan. 1832	3	..	204	14	280	19	39	6	7	1	533	40
" "	Draft joined 23d Feb. 1832	..	..	2	..	1	..	1	..	..	..	3	..
25th "	Strength 1st Jan. 1832	..	..	177	11	146	6	73	11	12	..	408	28
" "	Draft joined Feb. "	..	..	57	..	14	..	8	..	..	..	79	..
36th "	Strength 1st Jan. "	3	..	240	22	158	19	65	14	8	7	474	62
" "	Draft joined Feb. "	..	..	25	3	3	..	8	..	..	..	36	..
65th "	Strength 1st Jan. "	5	..	186	5	220	10	10	1	3	1	424	17
" "	Draft joined Feb. "	4	..	26	27	27	..	7	..	2	..	66	..
69th "	Strength 1st Jan. "	11	..	336	18	199	5	7	..	3	..	556	23
86th "	Strength 1st Jan. "	5	..	236	198	198	20	43	4	8	1	490	27
" "	Draft joined Feb. "	2	..	14	5	5	..	1	..	1	..	23	..
93d "	Strength 1st Jan. "	3	..	218	19	142	24	63	12	13	4	439	59
" "	Draft joined Feb. "	1	..	58	8	8	..	..	..	..	..	67	..
Total for 1832 .		39	..	2059	107	1544	118	410	54	63	14	4115	293
1st Foot.	Strength 1st Jan. 1833 .	2	..	186	23	212	28	58	13	12	1	470	65
" "	(Drafts joined April and May 1833 .)	..	..	83	..	8	..	..	..	..	..	91	..
19th "	Strength 1st Jan. 1833	2	..	111	7	326	26	44	9	6	..	489	42
" "	Draft joined May "	..	..	26	15	15	..	7	3	3	..	51	..
25th "	Strength 1st Jan. "	1	..	181	4	177	14	64	8	9	1	432	27
" "	(Drafts joined Feb. and June 1833 .)	..	..	99	15	15	..	2	..	2	..	118	..
36th "	Strength 1st Jan. 1833	..	..	164	12	180	20	75	4	7	3	426	39
" "	(Drafts joined April and June 1833 .)	..	..	96	12	12	..	18	..	8	..	134	..
65th "	Strength 1st Jan. 1833	6	..	206	6	232	23	11	1	4	1	459	31
" "	Draft joined May "	..	..	61	32	32	..	6	..	1	..	100	..
67th "	Strength 1st Jan. "	2	..	234	8	250	15	21	2	2	..	509	25
" "	Transferred Feb. "	..	..	..	2	2	..	..	..	..	..	2	..
69th "	Strength 1st Jan. "	9	..	263	4	246	10	8	..	3	..	529	14
" "	(Drafts joined May and June 1833 .)	..	..	23	3	3	..	..	..	..	..	26	..
86th "	Strength 1st Jan. 1833	5	..	60	6	332	31	70	16	15	1	482	54
" "	Draft joined May "	..	..	47	23	23	..	5	..	..	..	75	..
93d "	Strength 1st Jan. "	2	..	209	9	147	13	39	1	8	2	405	25
" "	Draft joined June "	2	..	125	17	17	..	..	..	..	..	144	..
Total from 1st Jan. 1833 to 31st March 1834 .		31	..	2174	79	2229	180	423	54	80	9	4942	322
1st Foot.	Strength 1st April 1834 .	1	..	226	3	241	10	56	5	10	..	534	18
" "	Draft joined April "	2	..	10	3	3	..	..	..	..	..	15	..
19th "	Strength 1st April "	1	..	84	4	327	14	71	8	6	2	489	28
" "	Draft joined May "	..	..	21	11	11	..	4	..	..	..	36	..
25th "	Strength 1st April "	2	..	271	3	168	10	66	3	12	4	519	20
" "	Draft joined 5th May "	..	..	26	2	2	..	..	..	..	..	28	..
36th "	Strength 1st April "	3	..	200	8	217	13	81	13	17	2	518	36
" "	Draft joined May "	3	..	32	3	3	..	4	..	1	..	43	..
65th "	Strength 1st April "	7	..	127	5	288	9	90	3	2	1	514	18
" "	Draft joined April "	3	..	8	1	1	..	1	..	..	..	13	..
67th "	Strength 1st April "	..	..	157	5	298	25	23	3	2	..	480	33
" "	Draft joined April "	..	..	17	44	44	..	2	..	..	..	63	..
69th "	Strength 1st April "	..	..	208	8	315	9	16	2	6	..	545	19
" "	Draft joined May "	..	..	8	7	7	..	3	..	..	..	18	..
76th "	Strength 1st April "	6	..	183	25	248	36	85	18	34	1	556	80
86th "	Strength 1st April "	5	..	84	2	326	14	90	13	15	1	521	30
Total from 1st April 1834 to 31st March 1835 .		33	..	1662	63	2499	140	592	68	105	11	4891	282

\* The numbers alive at each age in 1830 cannot be ascertained with the same precision as for the subsequent period, because the Returns of Ages were not established till then; and it therefore became necessary to estimate the strength of each class for that year from the Returns of the succeeding one.

Showing the Ages of the Troops composing the Service Companies of Corps stationed in the Windward and Leeward Command, &c.—(continued.)

Corps.	Year.	Under 18 Years.		18 to 25.		25 to 33.		33 to 40.		40 to 50.		Total.	
		Strength	Died	Strength	Died	Strength	Died	Strength	Died	Strength	Died	Strength	Died
19th Foot.	Strength 1st April 1835*	1	..	87	..	314	32	76	4	11	..	489	36
25th "	" " " "	3	..	174	5	283	17	49	2	3	3	512	27
36th "	" " " "	6	..	162	11	226	21	92	11	20	..	506	43
65th "	" " " "	4	..	94	2	344	15	54	3	2	..	498	20
67th "	" " " "	..	..	128	8	336	29	31	1	1	..	496	38
69th "	" " " "	..	..	105	5	387	24	34	2	5	..	531	31
74th "	" " " "	8	..	217	8	175	10	74	4	30	3	504	25
76th "	" " " "	6	..	158	10	212	24	67	9	33	4	476	47
86th "	" " " "	4	..	48	..	296	20	111	11	20	3	479	34
Total from 1st April 1835 to 31st March 1836 . }		32	..	1173	49	2573	192	588	47	125	13	4491	301
14th Foot.	Strength 1st April 1836 .	5	..	360	59	132	18	23	4	..	..	520	81
36th "	" " " "	8	..	177	18	210	48	81	16	16	6	492	88
65th "	" " " "	10	..	98	3	363	15	55	2	4	2	530	22
67th "	" " " "	2	..	100	5	333	20	49	2	1	..	485	32
69th "	" " " "	..	..	71	2	375	19	46	1	9	..	501	22
74th "	" " " "	10	..	174	4	198	4	86	4	34	3	502	15
76th "	" " " "	7	1	119	4	242	28	125	7	9	3	502	43
86th "	" " " "	4	..	78	2	271	6	129	5	18	2	500	15
89th "	" " " "	3	..	403	40	78	31	18	8	2	..	504	79
Total from 1st April 1836 to 31st March 1837 . }		49	1	1580	137	2202	189	612	54	93	16	4536	397

\* It has been deemed unnecessary to keep the drafts in the last two years separate, as they all joined about the month of January, and were consequently included in the estimate of the strength in March following. In the preceding years it was necessary to do so, because in most instances they joined a few months after the strength for the year was made up, and had they been omitted, it would have tended materially to invalidate the results.

#### General Results from 1st January 1830 to 31st March 1837.

Period.	Under 18 Years.		18 to 25.		25 to 33.		33 to 40.		40 to 50.		Total of all Ages.	
	Strength	Died	Strength	Died	Strength	Died	Strength	Died	Strength	Died	Strength	Died
1st January to 31st December 1830 .	31	..	1873	96	1322	99	510	41	86	12	3822	248
" " " " 1831 .	29	..	1851	104	1264	122	415	40	57	3	3616	269
" " " " 1832 .	39	..	2059	107	1544	178	410	54	63	14	4115	293
" " 1833 to 31st March 1834 .	31	..	2174	79	2229	180	428	54	80	9	4942	322
1st April 1834 " " 1835 .	33	..	1662	63	2499	140	592	68	105	11	4891	282
" " 1835 " " 1836 .	32	..	1173	49	2573	192	588	47	125	13	4491	301
" " 1836 " " 1837 .	49	1	1580	137	2202	189	612	54	93	16	4536	397
Total for Seven Years and a Quarter .	244	1	12,372	633	13,633	1040	3555	358	609	78	30,413	2112
Deduct a 29th part of the Deaths to ascertain the Mortality of Seven Years exactly . . . . .	..	..	..	22	..	36	..	12	..	3	..	73
Total for Seven Years . . . . .	244	1	12,372	613	13,833	1004	3555	346	609	75	30,413	2039

Of the above there Died at Chatham, or on their Passage Home, the following Numbers of each Class.

Period.	18 to 25.	25 to 33.	33 to 40.	40 to 50.	Total.
1st January to 31st December 1830 .	1	1	1	..	..
" " " " 1831 .	7	3	1	..	11
" " " " 1832 .	2	5	4	5	16
" " 1833 to 31st March 1834 .	3	13	4	1	21
1st April 1834 " " 1835 .	2	7	4	..	13
" " 1835 " " 1836 .	..	14	4	1	19
" " 1836 " " 1837 .	..	..	..	..	..
Total . . . . .	15	43	18	7	83

Showing the AGES of the Troops composing the Service Companies of Corps stationed in JAMAICA, and the Deaths at each Age, from 1st January 1830 to 31st March 1837.

Corps.	Year.	Under 18 Years.		18 to 25.		25 to 33.		33 to 40.		40 to 50.		Total.	
		Strength	Died	Strength	Died	Strength	Died	Strength	Died	Strength	Died	Strength	Died
22d Foot.	Strength 1st Jan. 1830 .	..	..	258	28	188	28	51	9	4	1	501	66
" "	Draft joined 19th Jan. 1830 .	..	..	29	28	16	7	7	9	..	1	52	58
33d "	Strength 1st Jan. 1830 .	..	..	419	32	115	19	9	7	4	..	547	58
84th "	Strength 1st Jan. , ,	2	..	134	21	308	23	30	10	10	2	484	58
" "	Draft joined 16th Jan. 1830 .	5	2	39	18	18	7	7	10	2	2	71	32
91st "	Strength 1st Jan. 1830 .	..	..	319	17	139	10	68	4	17	1	543	32
Total for 1830 .		7	2	1198	98	784	80	172	30	37	4	2198	214
22d Foot.	Strength 1st Jan. 1831 .	..	..	258	17	176	33	49	11	3	2	486	63
" "	Draft joined 13th Jan. 1831 .	..	..	1	1	1	1	..	..	..	2	2	49
33d "	Strength 1st Jan. 1831 .	..	..	225	23	203	15	57	9	4	2	489	77
77th "	Strength 1st Jan. , ,	3	..	282	45	181	19	56	12	6	1	528	95
84th "	Strength 1st Jan. , ,	5	1	150	41	301	43	26	8	9	2	491	284
Total for 1831 .		8	1	916	126	862	110	183	40	22	7	1996	284
22d Foot.	Strength 1st Jan. 1832 .	..	..	215	24	149	27	51	3	3	1	418	55
" "	{ Transferred 1st Jan. and 19th May 1832 .	..	..	1	2	2	1	1	..	..	4	4	50
56th "	Strength 1st Jan. 1832 .	3	..	299	23	211	20	39	6	3	1	555	29
77th "	Strength 1st Jan. , ,	1	..	217	12	159	10	58	6	7	1	442	85
84th "	Strength 1st Jan. , ,	4	..	102	40	243	35	17	8	3	2	369	219
" "	Transferred 1st Jan. , ,	..	..	73	48	48	9	9	..	..	130	130	219
Total for 1832 .		8	..	907	99	812	92	175	23	16	5	1918	219
22d Foot.	Strength 1st Jan. 1833 .	..	..	136	13	153	20	58	7	3	1	350	41
" "	{ Drafts joined 20th April and 10th May 1833 .	3	..	144	12	29	1	10	7	4	1	190	58
37th "	Strength 1st Jan. 1833 .	..	..	152	12	216	25	92	13	32	8	492	60
" "	Draft joined in May 1833 .	..	..	36	1	1	2	2	2	39	1	39	80
56th "	Strength 1st Jan. 1833 .	1	..	216	16	233	35	29	8	6	1	487	58
" "	{ Drafts joined April and May 1833 .	..	..	43	20	20	2	2	8	1	1	66	219
77th "	Strength 1st Jan. 1833 .	..	..	166	18	184	52	47	8	4	2	401	80
" "	{ Drafts joined 14th Jan. and 25th March 1833 .	..	..	117	30	30	2	2	8	1	2	150	58
84th "	Strength 1st Jan. 1833 .	3	1	161	21	203	27	27	6	6	3	400	58
" "	{ Drafts joined April and May 1833 .	2	..	123	12	12	5	5	6	3	3	145	58
Total from 1st Jan. 1833 to 31st March 1834 .		9	1	1294	80	1083	159	274	42	60	15	2720	297
22d Foot.	Strength 1st April 1834 .	2	..	320	24	83	26	104	8	16	2	525	60
37th "	Strength 1st April , ,	1	..	88	5	265	15	68	7	32	3	454	30
" "	Draft joined 26th April 1834 .	..	..	51	1	1	2	2	2	..	3	54	43
56th "	Strength 1st April 1834 .	..	..	176	10	266	24	27	8	6	1	475	21
" "	Draft joined April , ,	1	..	15	8	4	..	..	..	..	..	20	21
84th "	Strength 1st April , ,	6	..	299	8	177	11	26	2	7	..	515	21
Total from 1st April 1834 to 31st March 1835 .		10	..	949	47	796	76	227	25	61	6	2043	154
8th Foot.	Strength 1st April 1835 .	2	..	246	22	151	35	40	8	18	3	459	68
22d "	" " " " " "	2	..	269	8	112	9	52	3	17	1	452	21
37th "	" " " " " "	2	..	301	1	104	4	38	4	26	..	471	9
56th "	" " " " " "	3	..	139	6	296	24	23	4	7	1	468	35
64th "	" " " " " "	8	..	164	25	228	16	73	8	4	..	477	49
84th "	" " " " " "	3	..	323	5	161	12	20	1	4	..	511	18
Total from 1st April 1835 to 31st March 1836 .		20	..	1442	67	1054	100	246	28	76	5	2838	200
8th Foot.	Strength 1st April 1836 .	1	..	190	9	223	14	41	2	19	1	474	26
22d "	" " " " " "	6	..	169	4	247	13	66	4	16	1	504	22
37th "	" " " " " "	5	..	367	18	90	27	26	2	27	1	515	48
56th "	" " " " " "	3	1	155	12	284	27	34	4	7	1	483	45
64th "	" " " " " "	7	..	146	8	225	7	85	5	7	..	470	20
84th "	" " " " " "	4	..	326	14	147	25	13	5	4	1	494	45
Total from 1st April 1836 to 31st March 1837 .		26	1	1353	65	1216	113	265	22	80	5	2940	206



General Results from 1st January 1830 to 31st March 1837—(continued.)

Period.	Under 18 Years.		18 to 25.		25 to 33.		33 to 40.		40 to 50.		Total of all Ages.	
	Strength	Died	Strength	Died	Strength	Died	Strength	Died	Strength	Died	Strength	Died
1st January to 31st December 1830 .	7	2	1198	98	784	80	172	30	37	4	2198	214
"                    "          1831 .	8	1	916	126	862	110	188	40	22	7	1996	284
"                    "          1832 .	8	..	907	99	812	92	175	23	16	5	1918	219
"          1833 to 31st March 1834 .	9	1	1294	80	1083	159	274	42	60	15	2720	297
1st April 1834                    "          1835 .	10	..	949	47	796	76	227	25	61	6	2043	154
"                    "          1836 .	20	..	1442	67	1054	100	246	28	76	5	2838	200
"                    "          1837 .	26	1	1353	65	1216	113	265	22	80	5	2940	206
Total for Seven Years and a Quarter .	88	5	8059	582	6607	730	1547	210	352	47	16,653	1574
Deduct a 29th part of the Deaths to ascertain the Mortality of Seven Years exactly . . . . .	..	..	..	20	..	25	..	7	..	2	..	54
Total for Seven Years . . . . .	88	5	8059	562	6607	705	1547	203	352	45	16,653	1520

Of the above there Died at Chatham, or on their Passage, the following Numbers of each Class.

Period.	18 to 25.	25 to 33.	33 to 40.	40 to 50.	Total.
1st January to 31st December 1830 .	..	..	1	..	1
"                    "          1831 .	1	..	..	..	1
"                    "          1832 .	3	..	3	2	8
"          1833 to 31st March 1834 .	3	5	2	2	12
1st April 1834                    "          1835 .	2	4	3	..	9
"                    "          1836 .	..	2	..	..	2
"                    "          1837 .	1	2	2	1	6
Total . . . . .	10	13	11	5	39

	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>1816</b>												
2d Foot, Strength . . .	..	..	..	..	..	776	766	734	722	710	680	673
Deaths . . .	..	..	..	..	..	..	3	1	12	14	30	29
60th Ft., 4th Bn., Strength . . .	..	..	..	..	..	846	844	834	822	814	810	807
Deaths . . .	..	..	..	..	..	4	2	6	10	6	4	3
63d Foot, Strength . . .	..	..	..	..	..	890	879	876	873	869	861	864
Deaths . . .	..	..	..	..	..	6	10	5	3	4	8	11
R. Y. Rangers, Strength . . .	..	..	..	..	..	1167	1144	1078	1041	1027	1016	1122
Deaths . . .	..	..	..	..	..	8	9	14	20	12	9	24
R. W. I. Rangers, Strength . . .	..	..	..	..	868	882	878	869	866	825	804	1003
Deaths . . .	..	..	..	..	8	4	..	9	4	37	25	25
<b>1817</b>												
2d Foot, Strength . . .	682	678	673	672	721	736	729	719	678	641	625	611
Deaths . . .	11	4	2	1	1	3	7	10	41	37	15	15
60th Ft., 4th Batt. Strength . . .	794	786	780	774	845	841	828	826	812	811	808	807
Deaths . . .	10	5	7	5	7	4	6	6	7	..	2	1
63d Foot, Strength . . .	848	843	828	823	824	821	812	809	768	764	762	757
Deaths . . .	17	12	7	3	4	6	1	3	5	5	2	7
R. Y. Rangers, Strength . . .	1091	1057	1018	992	966	956	940	915	902	875	853	832
Deaths . . .	25	33	36	23	24	15	15	23	11	24	22	21
R. W. I. Rangers, Strength . . .	980	954	947	930	937	961	957	939	894	854	830	822
Deaths . . .	26	23	4	14	13	6	7	17	44	40	24	8
<b>1818</b>												
2d Foot, Strength . . .	604	595	598	586	578	544	541	541	538	533	533	532
Deaths . . .	7	11	8	12	9	8	3	..	1	3	1	2
60th Ft., 4th Batt. Strength . . .	803	798	794	787	782	771	766	758	724	680	620	611
Deaths . . .	2	..	..	5	2	..	3	2	3	7	..	3
63d Foot, Strength . . .	752	745	750	748	733	755	765	752	743	738	734	726
Deaths . . .	1	2	2	2	5	2	..	3	5	3	3	6
R. Y. Rangers, Strength . . .	817	794	794	764	750	865	829	814	770	730	700	682
Deaths . . .	13	21	..	30	10	2	7	14	27	40	30	14
R. W. I. Rangers, Strength . . .	812	803	783	776	773	960	938	938	874	841	826	803
Deaths . . .	8	7	12	4	3	4	2	..	21	8	14	22
<b>1819</b>												
2d Foot, Strength . . .	565	552	551	593	589	622	611	602	593	583	581	570
Deaths . . .	5	2	..	3	..	2	9	10	9	9	1	11
4th Foot, Strength . . .	..	..	..	682	680	695	690	683	676	668	663	660
Deaths . . .	..	..	..	..	1	4	4	8	7	8	5	3
5th Foot, Strength . . .	..	..	..	695	695	712	710	710	709	708	707	704
Deaths . . .	..	..	..	..	..	1	..	..	1	1	1	3
9th Foot, Strength . . .	..	..	..	665	664							

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Showing the Strength of, and Deaths in, every Corps serving in the Windward and Leeward Command, &amp;c.—(continued).

	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1825												
4th Foot, Strength	517	539	532	539	537	523	513	507	502	502	497	495
Deaths	5	5	7	..	1	1	4	4	6	1	5	2
6th Foot, Strength	479	480	476	471	468	479	455	443	438	433	429	427
Deaths	4	2	4	6	2	4	6	12	4	4	6	2
9th Foot, Strength	494	500	498	496	493	490	466	464	460	458	454	449
Deaths	3	5	1	3	1	3	1	4	2	2	3	5
21st Foot, Strength	481	546	543	541	538	520	504	497	494	491	490	490
Deaths	1	1	3	2	3	5	7	7	3	3	2	..
27th Foot, Strength	488	510	506	506	505	520	493	479	471	466	461	459
Deaths	2	1	4	..	..	4	4	16	5	5	4	2
35th Foot, Strength	540	544	543	537	535	534	488	488	486	486	482	478
Deaths	3	1	1	1	3	4	3	1	3	..	4	4
60th Ft., 2d Batt. Strength	571	566	560	604	600	588	563	558	553	541	532	529
Deaths	4	5	5	4	4	7	15	4	5	2	9	3
93d Foot, Strength	478	507	496	515	513	517	502	500	493	491	489	489
Deaths	..	4	5	..	1	1	3	..	..	2	2	..
1826												
1st Foot, 1st Batt. Strength	..	212	382	553	551	550	550	545	545	544	544	557
Deaths	..	..	..	..	2	1	..	1	..	1	..	2
4th Foot, Strength	495	..	..	..	..	..	..	..	..	..	..	..
Deaths	..	..	..	..	..	..	..	..	..	..	..	..
5th Foot, Strength	424	416	97	..	..	..	..	..	..	..	..	..
Deaths	3	7	2	..	..	..	..	..	..	..	..	..
9th Foot, Strength	466	451	445	435	431	429	424	392	388	385	381	..
Deaths	3	4	6	2	4	2	5	9	3	3	4	..
19th Foot, Strength	..	..	..	..	..	..	..	..	..	..	..	554
Deaths	..	..	..	..	..	..	..	..	..	..	..	1
21st Foot, Strength	540	538	535	522	518	516	513	500	497	494	493	367
Deaths	..	1	3	..	4	3	3	3	4	3	1	1
25th Foot, Strength	..	556	556	556	553	551	550	544	539	536	532	542
Deaths	..	..	..	..	3	2	1	4	2	4	2	1
27th Foot, Strength	486	462	478	478	475	475	471	436	428	416	414	416
Deaths	3	5	4	1	3	1	3	9	8	12	2	1
35th Foot, Strength	486	470	470	491	487	484	482	404	395	395	392	381
Deaths	1	1	..	2	4	3	2	2	21	..	3	10
60th Ft., 2d Batt. Strength	522	518	517	515	512	510	504	449	434	419	415	414
Deaths	7	3	1	4	3	1	6	5	15	15	4	1
86th Foot, Strength	..	..	..	..	..	..	..	..	..	..	225	557
Deaths	..	..	..	..	..	..	..	..	..	..	..	..
93d Foot, Strength	497	504	501	504	502	497	497	463	462	463	461	459
Deaths	2	1	3	2	3	5	..	..	1	..	2	2
1827												
1st Foot, 1st Batt. Strength	550	549	546	545	544	533	530	518	517	515	513	542
Deaths	2	1	1	..	1	..	2	..	1	1	2	..
19th Foot, Strength	551	547	546	543	538	509	478	456	447	445	436	451
Deaths	3	2	2	3	5	27	31	16	9	2	7	5
25th Foot, Strength	533	531	529	530	528	520	517	474	473	471	473	547
Deaths	2	2	2	..	1	2	..	..	1	1	1	1
27th Foot, Strength	493	487	483	480	475	454	452	448	444	443	463	534
Deaths	2	5	4	3	5	6	3	4	4	1	..	..
35th Foot, Strength	454	449	441	435	433	396	394	383	389	381	515	508
Deaths	6	5	9	6	2	7	3	4	8	8	12	7
60th Ft., 2d Batt. Strength	469	469	467	465	462	407	400	386	374	372	370	369
Deaths	5	..	1	1	3	..	7	4	11	2	1	..
86th Foot, Strength	553	552	548	548	547	544	542	522	514	511	507	504
Deaths	4	1	4	..	1	3	2	8	8	3	4	3
93d Foot, Strength	516	512	512	510	507	475	472	451	449	449	448	520
Deaths	1	4	..	1	1	3	3	2	2	..	1	2
1828												
1st Foot, 1st Batt. Strength	532	521	508	503	502	488	480	475	471	471	468	464
Deaths	9	11	13	5	1	4	8	5	4	..	3	4
19th Foot, Strength	445	441	439	438	438	417	416	416	416	415	415	566
Deaths	6	4	2	1	..	..	1	..	..	1	..	..
1828 (continued).												
25th Foot, Strength	542	539	529	521	518	513	490	465	440	437	436	435
Deaths	4	2	10	8	3	3	22	28	25	4	1	1
27th Foot, Strength	532	531	528	528	526	519	518	514	510	506	535	534
Deaths	1	1	3	..	2	2	3	5	4	3	11	2
35th Foot, Strength	500	499	496	490	489	460	459	460	457	454	523	522
Deaths	4	1	3	4	3	2	1	..	3	2	3	1
60th Ft., 2d Batt. Strength	368	365	366	366	365	341	340	338	336	335	336	335
Deaths	1	3	..	..	1	..	1	2	2	1	..	..
86th Foot, Strength	500	497	497	514	514	504	503	502	498	494	490	488
Deaths	4	1	..	..	2	1	1	1	3	5	4	2
93d Foot, Strength	519	518	515	512	511	480	478	476	475	473	526	523
Deaths	..	1	2	3	1	2	1	1	2	2	4	3
1829												
1st Foot, 1st Batt. Strength	462	529	526	525	525	522	510	504	497	496	494	544
Deaths	2	3	3	1	..	3	4	6	4	1	1	..
19th Foot, Strength	565	564	565	565	564	554	553	552	550	549	547	568
Deaths	1	..	..	..	1	2	..	..	2	1	2	..
25th Foot, Strength	488	480	479	475	474	472	454	450	447	443	439	438
Deaths	2	8	1	3	1	2	4	4	1	2	4	1
27th Foot, Strength	530	529	521	516	514	498	495	494	492	490	488	547
Deaths	4	1	7	5	2	2	3	1	2	2	2	1
35th Foot, Strength	519	513	510	505	498	484	475	471	464	458	452	449
Deaths	3	3	3	6	7	3	9	3	8	5	6	3
60th Ft., 2d Batt. Strength	335	334	333	333	332	331	320	319	315	309	309	309
Deaths	2	1	1	..	1	1	1	1	4	6	1	..
65th Foot, Strength	..	..	..	..	..	..	..	..	..	..	..	557
Deaths	..	..	..	..	..	..	..	..	..	..	..	..
86th Foot, Strength	484	535	533	530	528	512	510	506	504	501	499	536
Deaths	2	..	2	3	2	4	2	4	2	2	2	5
93d Foot, Strength	519	513	511	510	504	478	475	474	471	467	466	462
Deaths	2	4	2	2	5	3	3	1	3	3	1	4
1830												
1st Foot, 1st Batt. Strength	543	537	534	532	529	525	518	514	512	500	496	495
Deaths	1	5	3	3	3	1	2	4	2	12	5	1
19th Foot, Strength	573	574	574	572	571	564	564	562	562	560	558	556
Deaths	1	..	..	2	2	2	..	2	..	2	2	2
25th Foot, Strength	445	532	529	528	525	521	507	503	493	490	488	483
Deaths	..	4	2	1	3	3	2	5	6	2	2	..
27th Foot, Strength	546	545	546	546	545	539	539	540	537	535	528	14
Deaths	1	1	2	..	..	4	..	..	3	2	5	1
35th Foot, Strength	506	498	496	493	482	466	463	461	457	453	445	439
Deaths	1	8	3	2								

Showing the Strength of, and Deaths in, every Corps serving in the Windward and Leeward Command, &amp;c.—(continued).

	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.		Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>1831</b> (continued).																									
69th Foot, Strength . . .	..	..	..	..	..	..	..	..	..	..	..	260	76th Foot, Strength . . .	..	..	553	550	548	547	544	541	532	525	514	500
Deaths . . .	..	..	..	..	..	..	..	..	..	..	..	..	Deaths . . .	..	..	..	3	2	1	3	3	9	7	11	14
86th Foot, Strength . . .	514	513	513	512	509	507	501	500	498	496	492	490	86th Foot, Strength . . .	526	525	520	519	517	517	508	500	495	495	492	491
Deaths . . .	4	1	1	1	3	..	3	1	2	2	1	1	Deaths . . .	3	1	5	1	2	1	4	8	5	..	..	..
93d Foot, Strength . . .	481	478	476	473	472	462	457	452	448	444	442	439	93d Foot, Strength . . .	376	377	258	..	..	..	..	..	..	..	..	..
Deaths . . .	3	3	..	3	1	3	5	5	3	4	3	2	Deaths . . .	1	..	2	..	..	..	..	..	..	..	..	..
<b>1832</b>													<b>1835</b>												
1st Foot, 1st Batt. Strength . . .	483	492	511	509	507	500	499	497	494	487	480	470	1st Foot, 1st Batt. Strength . . .	502	502	501	499	499	500	475	475	472	470	430	..
Deaths . . .	2	1	1	..	2	1	..	3	3	7	7	10	Deaths . . .	3	..	1	2	..	..	..	..	3	..	..	3
19th Foot, Strength . . .	533	531	528	524	524	522	511	504	503	499	491	489	19th Foot, Strength . . .	483	491	489	484	481	481	456	448	447	445	448	506
Deaths . . .	..	5	3	3	..	1	6	7	1	3	8	2	Deaths . . .	3	..	2	4	3	..	3	4	1	1	3	1
25th Foot, Strength . . .	467	483	481	479	478	471	450	447	442	436	434	431	25th Foot, Strength . . .	514	514	511	509	507	502	491	486	484	478	435	433
Deaths . . .	1	1	1	2	1	4	2	3	5	4	1	2	Deaths . . .	1	..	1	..	2	5	..	4	1	4	3	2
35th Foot, Strength . . .	364	186	..	..	..	..	..	..	..	..	..	..	36th Foot, Strength . . .	506	509	506	503	502	500	483	481	474	466	479	468
Deaths . . .	1	1	2	..	..	..	..	..	..	..	..	..	Deaths . . .	4	..	1	3	1	2	2	2	6	6	8	8
36th Foot, Strength . . .	472	505	500	499	495	465	459	453	442	432	429	426	65th Foot, Strength . . .	504	503	498	497	496	495	467	467	463	463	487	533
Deaths . . .	2	3	1	1	4	4	6	7	13	9	2	2	Deaths . . .	..	1	5	2	1	1	2	..	4	..	..	1
65th Foot, Strength . . .	421	484	483	481	480	480	470	465	464	463	461	459	67th Foot, Strength . . .	501	498	496	494	495	490	478	477	476	472	463	452
Deaths . . .	3	..	1	2	1	..	..	5	1	..	1	2	Deaths . . .	4	3	1	2	1	3	2	1	1	4	9	9
69th Foot, Strength . . .	556	555	553	550	550	546	543	543	540	535	533	529	69th Foot, Strength . . .	530	532	531	525	521	515	496	489	486	483	495	511
Deaths . . .	..	1	2	3	..	3	3	..	2	5	1	3	Deaths . . .	3	2	1	6	3	5	3	4	3	3	2	..
86th Foot, Strength . . .	487	505	501	500	498	493	490	488	486	485	484	482	74th Foot, Strength . . .	510	507	504	502	500	500	497	497	492	492	488	482
Deaths . . .	3	1	4	1	2	4	4	2	2	1	1	2	Deaths . . .	..	..	3	1	2	..	..	1	4	..	3	7
93d Foot, Strength . . .	431	492	483	478	475	437	430	426	417	409	406	405	76th Foot, Strength . . .	494	489	476	472	469	465	458	452	449	443	454	449
Deaths . . .	8	3	6	3	4	7	5	3	6	5	3	1	Deaths . . .	6	5	13	4	3	4	..	5	4	5	..	4
<b>1833</b>													<b>1836</b>												
1st Foot, 1st Batt. Strength . . .	467	467	465	481	541	535	513	509	505	505	546	539	14th Foot, Strength . . .	..	..	520	519	514	493	483	480	469	452	442	440
Deaths . . .	3	1	2	5	8	8	5	4	4	5	5	7	Deaths . . .	..	..	..	1	5	21	5	5	11	17	9	2
19th Foot, Strength . . .	488	483	482	479	526	523	514	507	501	502	499	496	19th Foot, Strength . . .	503	499	494	491	489	490	10	10	4	4	4	4
Deaths . . .	1	2	..	3	1	3	3	6	6	2	3	2	Deaths . . .	2	2	5	2	2	..	3	..	1	..	..	..
25th Foot, Strength . . .	427	486	483	482	481	539	516	514	512	511	523	524	25th Foot, Strength . . .	430	429	..	..	..	..	..	..	..	..	..	..
Deaths . . .	3	..	2	1	1	2	4	3	2	1	1	..	Deaths . . .	..	1	3	..	..	..	..	..	..	..	..	..
36th Foot, Strength . . .	426	424	423	474	471	547	527	524	523	521	526	524	36th Foot, Strength . . .	496	494	492	488	487	479	470	460	452	441	430	422
Deaths . . .	..	1	1	3	2	4	7	2	..	3	4	2	Deaths . . .	3	2	2	2	1	8	8	10	8	11	9	8
65th Foot, Strength . . .	458	458	457	495	549	546	523	522	522	519	518	515	65th Foot, Strength . . .	531	532	530	527	526	525	523	522	519	516	513	511
Deaths . . .	1	..	1	1	4	3	3	2	1	2	6	3	Deaths . . .	2	..	2	3	1	1	5	1	2	3	3	2
67th Foot, Strength . . .	..	..	506	506	502	500	499	496	492	490	487	484	67th Foot, Strength . . .	491	488	483	479	474	467	470	465	462	459	458	455
Deaths . . .	..	..	..	..	3	2	..	2	4	2	2	3	Deaths . . .	2	2	2	4	6	4	2	4	2	3	1	2
69th Foot, Strength . . .	528	527	527	526	524	546	539	539	536	535	547	547	69th Foot, Strength . . .	509	507	503	500	500	496	493	489	483	480	476	472
Deaths . . .	1	1	..	2	2	3	1	..	2	1	1	..	Deaths . . .	..	..	..	1	..	1	2	4	2	2	5	4
86th Foot, Strength . . .	481	479	477	502	550	545	540	529	523	517	533	529	74th Foot, Strength . . .	510	506	502	595	593	489	491	491	490	490	488	487
Deaths . . .	2	2	2	1	1	5	3	10	6	6	3	4	Deaths . . .	2	4	1	2	1	3	1	..	1	..	1	..
93d Foot, Strength . . .	402	400	400	397	395	537	503	503	502	383	380	378	76th Foot, Strength . . .	515	508	502	497	494	490	489	481	477	469	465	459
Deaths . . .	2	2	..	2	1	2	1	1	1	2	3	1	Deaths . . .	5	7	4	5	3	2	3	3	4	3	1	6
<b>1834</b>													86th Foot, Strength . . .	500	500	500	498	497	490	483	476	472	472	464	455
1st Foot, 1st Batt. Strength . . .	537	535	534	544	540	541	513	511	509	507	506	506	Deaths . . .	2	..	1	1	..	3	..	2	..	..	2	4
Deaths . . .	1	2	1	4	3	..	2	1	1	2	..	..	89th Foot, Strength . . .	512	508	506	498	495	492	488	480	473	456	443	439
19th Foot, Strength . . .	491	489	489	523	521	517	499	495	494	492	487	486	Deaths . . .	..	1	..	8	3	2	4	8	5	16	12	3
Deaths . . .	5	2	..	1	2	4	3	3	1	2	2	1	<b>1837</b>												
25th Foot, Strength . . .	520	520	516	540	537	534	528	527	524	523	520	518	14th Foot, Strength . . .	..	..	..	..	..	..	458	458	..	..	..	..
Deaths . . .	2	..	1	3	3	2	2	1	2	1	3	1	Deaths . . .	..	..	..	..	..	..	4	..	..	..	..	..
36th Foot, Strength . . .	518	518	518	553	548	547	527	525	524	522	516	511	67th Foot, Strength . . .	..	..	..	..	..	..	509	508	..	..	..	..
Deaths . . .	6	..	1	3	5	1	2	1	1	2	5	5	Deaths . . .	..	..	..	..	..	..	1	..	..	..	..	..
65th Foot, Strength . . .	516	514	514	525	525	524	509	507	506	506	502	500	76th Foot, Strength . . .	..	..	..	..	..	..	490	485	..	..	..	..
Deaths . . .	..	1	..	..	..	..	1	2	1	..	4	1	Deaths . . .	..	..	..	..	..	..	6	4	..	..	..	..
67th Foot, Strength . . .	483	478	478	537	535	533	518	516	513	511	508	507													
Deaths . . .	2	4	..	1	2	1	6	2	3	2	3	2													
69th Foot, Strength . . .	547	546	545	563	559	556	545	543	539	537	534	534													
Deaths . . .	..	1	..	..	1	2	2	1	4	..	2	..													
74th Foot, Strength . . .	..	..	..	..	..	..	..	..	..	..	513	511													
Deaths . . .	..	..	..	..	..	..	..	..	..	..	..	2													



Showing the Strength of, and Deaths in, every Corps serving in Jamaica, &amp;c.—(continued).

1827 (continued).													1832 (continued).													
	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.		Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	
77th Foot, Strength .	343	537	530	514	513	514	514	514	511	509	482	467	56th Foot, Strength .	..	554	548	548	541	533	518	507	500	495	491	487	
Deaths .	3	5	6	2	..	..	..	2	3	2	25	14	Deaths .	..	..	..	..	4	5	17	8	5	2	3	6	
84th Foot, Strength .	..	185	555	555	555	555	554	440	417	406	391	376	77th Foot, Strength .	440	435	419	417	412	410	408	406	405	403	401		
Deaths .	..	..	..	..	..	..	1	112	20	10	15	16	Deaths .	3	5	3	1	2	5	1	..	1	1	2	2	
91st Foot, Strength .	331	328	521	509	507	506	504	498	483	470	458	445	84th Foot, Strength .	494	473	459	457	448	438	423	419	419	411	406	400	
Deaths .	5	3	2	3	..	1	2	6	16	12	11	14	Deaths .	5	20	3	2	9	11	11	6	..	4	5	6	
92d Foot, Strength .	368	159	157	..	..	..	..	..	..	..	..	..	1833													
Deaths .	6	1	1	..	..	..	..	..	..	..	..	..	8th Foot, Strength .	..	..	..	..	..	..	..	530	527	523	520	519	
1828													Deaths .	..	..	..	..	..	..	..	1	2	4	2	1	
22d Foot, Strength .	400	393	391	391	389	387	386	377	376	369	364	541	22d Foot, Strength .	346	345	344	495	519	511	502	500	500	490	486	484	
Deaths .	5	6	2	..	2	3	1	1	1	7	5	..	Deaths .	5	1	1	..	4	5	1	2	1	7	6	2	
33d Foot, Strength .	438	437	435	433	432	431	430	419	418	417	416	424	37th Foot, Strength .	485	481	477	461	500	498	492	485	479	471	471	462	
Deaths .	7	2	..	2	2	1	1	1	1	1	2	3	Deaths .	5	4	5	1	..	2	4	6	6	7	1	8	
77th Foot, Strength .	469	464	462	460	457	454	452	442	439	436	436	415	56th Foot, Strength .	483	478	476	491	536	526	516	515	508	499	492	482	
Deaths .	13	4	2	1	2	..	..	..	3	3	..	21	Deaths .	3	4	2	2	..	4	6	1	6	9	3	10	
84th Foot, Strength .	353	342	342	480	480	480	477	456	456	453	448	443	77th Foot, Strength .	399	397	395	473	524	520	518	508	489	478	471	462	
Deaths .	16	11	1	1	..	..	2	..	..	3	4	4	Deaths .	2	2	2	5	..	3	3	7	19	11	5	7	
91st Foot, Strength .	418	471	467	463	463	459	459	431	428	425	421	414	84th Foot, Strength .	398	390	382	490	522	513	498	495	488	484	484	482	
Deaths .	5	2	4	4	..	3	..	1	3	1	5	5	Deaths .	2	8	6	1	5	8	3	2	5	5	..	2	
1829													1834													
22d Foot, Strength .	535	528	528	525	525	522	520	513	512	505	502	501	8th Foot, Strength .	492	477	472	484	467	458	450	445	438	438	415	407	
Deaths .	..	6	..	3	..	2	1	2	1	4	2	3	Deaths .	27	14	5	4	3	8	8	4	6	4	12	5	
33d Foot, Strength .	422	538	535	532	528	523	524	519	519	519	517	508	22d Foot, Strength .	484	485	525	522	512	510	507	500	483	471	465	453	
Deaths .	..	..	1	3	3	4	1	1	..	..	2	8	Deaths .	..	..	3	3	3	1	3	7	14	9	6	4	
77th Foot, Strength .	396	490	489	489	490	490	490	474	471	466	459	458	37th Foot, Strength .	457	456	454	505	496	488	486	483	477	472	504	476	
Deaths .	7	3	1	..	..	..	..	1	4	5	6	1	Deaths .	4	..	3	3	2	4	2	2	2	..	5	7	
84th Foot, Strength .	426	518	518	514	516	515	515	501	492	491	486	485	56th Foot, Strength .	476	470	470	490	481	474	471	465	456	448	487	478	
Deaths .	10	1	..	2	..	1	1	1	8	9	2	5	Deaths .	6	3	..	3	1	6	2	4	7	5	5	2	
91st Foot, Strength .	409	511	512	508	506	502	500	496	494	493	494	490	64th Foot, Strength .	..	..	..	543	541	538	535	528	516	507	506	496	
Deaths .	3	..	..	2	..	1	4	3	..	..	..	3	Deaths .	..	..	..	..	2	3	3	6	9	4	1	7	
1830													77th Foot, Strength .	459	452	449	446	..	..	..	..	..	..	..	..	..
22d Foot, Strength .	551	550	545	543	540	539	535	530	518	513	501	487	Deaths .	3	6	3	3	1	2	..	..	..	..	..	..	
Deaths .	1	2	6	2	3	1	4	4	12	4	12	15	84th Foot, Strength .	477	474	515	514	500	498	498	493	492	492	531	514	
33d Foot, Strength .	535	521	519	516	513	511	510	505	491	491	484	489	Deaths .	3	2	2	..	4	1	2	4	1	..	1	2	
Deaths .	13	11	2	2	2	2	1	4	4	7	7	7	1835													
77th Foot, Strength .	563	557	548	549	549	549	547	545	543	540	536	528	8th Foot, Strength .	466	462	459	450	447	431	403	402	401	395	394	391	
Deaths .	1	5	1	..	..	1	2	1	3	3	4	8	Deaths .	1	..	1	3	2	16	28	1	1	5	1	3	
84th Foot, Strength .	552	547	546	542	540	532	532	529	528	518	503	491	22d Foot, Strength .	461	459	452	447	442	438	436	433	431	427	424	506	
Deaths .	4	2	1	2	2	8	..	3	1	6	17	12	Deaths .	..	2	6	5	3	4	1	1	2	2	..	1	
91st Foot, Strength .	541	529	527	526	525	524	522	515	512	506	505	499	37th Foot, Strength .	476	471	471	469	468	468	465	464	463	462	462	462	
Deaths .	5	4	2	..	1	2	..	5	2	6	1	6	Deaths .	1	1	..	2	1	..	3	1	1	..	..	..	
1831													56th Foot, Strength .	477	475	468	465	460	454	448	443	437	435	431	426	
22d Foot, Strength .	481	481	480	478	478	476	474	469	459	447	427	418	Deaths .	2	1	3	1	1	2	5	4	5	2	3	3	
Deaths .	7	..	1	2	..	1	3	4	8	12	19	7	64th Foot, Strength .	487	486	477	469	465	463	455	445	445	435	422	422	
33d Foot, Strength .	482	482	480	477	467	457	446	439	429	425	422	417	Deaths .	6	1	9	7	4	1	8	9	..	8	7	1	
Deaths .	3	..	2	..	6	6	6	10	7	4	3	1	84th Foot, Strength .	512	511	512	512	509	505	502	502	498	492	484	478	
77th Foot, Strength .	527	523	522	517	514	505	500	480	467	456	446	443	Deaths .	2	..	..	..	1	3	2	..	4	..	2	4	
Deaths .	1	3	..	1	2	7	5	20	12	11	10	3	1836													
84th Foot, Strength .	483	476	471	444	442	442	440	436	424	392	381	369	8th Foot, Strength .	473	479	474	463	461	458	447	446	444	439	436	497	
Deaths .	8	7	4	1	2	..	3	3	13	31	9	12	Deaths .	2	2	2	3	2	2	1	..	..	4	1	5	
91st Foot, Strength .	497	493	485	..	..	..	..	..	..	..	..	..	22d Foot, Strength .	505	504	504	497	494	492	485	478	473	472	466	464	
Deaths .	2	2	4	..	..	..	..	..	..	..	..	..	Deaths .	1	1	..	1	2	1	3	3	3	..	2	2	
1832													37th Foot, Strength .	518	516	515	515	503	494	471	466	462	457	453	495	
22d Foot, Strength .	416	413	394	393	394	387	383	379	371	370	360	351	Deaths .	..	..	1	..	5	8	6	4	4	3	5	4	
Deaths .	5	3	..	2	..	6	3	4	8	1	10	9	56th Foot, Strength .	494	489	483	477	465	459	456	453	447	447	442	439	
33d Foot, Strength .	281	281	..	..	..	..	..	..	..	..	..	..	Deaths .	3	3	4	6	6	6	1	1	4	1	6	1	
Deaths .	3	..	..	..	..	..	..	..	..	..	..	..	64th Foot, Strength .	476	474	474	469	4699								

\* Month wanting.



Showing the Number Treated, and Deaths among the OFFICERS serving in the Island

Classes of Diseases.	Years . Strength per Adj.- General's Return Specific Diseases.	1819		1820		1821		1822		1823		1824		1825		1826	
		107		88		117		91		94		90		105		80	
		Trtd.	Died.	Trtd.	Died.	Trtd.	Died.	Trtd.	Died.	Trtd.	Died.	Trtd.	Died.	Trtd.	Died.	Trtd.	Died.
Fevers.	Feb. Intermittens . . .	..	..	1	..	1	..	3	..	2	..	2	..	1	..	2	..
	,, Remittens . . .	96	30	34	3	41	7	62	12	24	5	18	3	72	27	16	1
	,, Cont. Com. . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Eruptive Fevers.	Varicella . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
	Rubeola . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diseases of the Lungs.	Pneumonia . . .	..	..	..	..	2	..	1	..	..	..	..	..	..	..	..	..
	Hæmoptysis . . .	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Phthisis Pulmonalis . .	..	..	1	..	..	..	2	1	..	..	..	..	..	..	..	..
	Catarrhus . . .	..	..	..	..	2	..	2	..	6	..	2	..	2	..	3	..
Diseases of the Liver.	Asthma . . .	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..
	Hepatitis . . .	2	..	1	..	3	..	2	..	1	..	2	..	..	..	2	..
Diseases of the Stomach and Bowels.	Enteritis . . .	..	..	1	1	..	..	..	..	..	..	..	..	1	1	..	..
	Dysentery . . .	1	..	2	..	2	..	3	..	23	..	..	..	1	..	1	..
	Dyspepsia . . .	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..
	Colica . . .	..	..	..	..	7	..	1	..	2	..	2	..	..	..	..	..
	Diarrhoea . . .	..	..	..	..	4	..	3	..	10	..	..	..	2	1	..	..
	Obstipatio . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diseases of the Brain.	Cholera Morbus . . .	3	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
	Apoplexia . . .	..	..	..	..	1	1	..	..	1	1	2	2	..	..	..	..
	Paralysis . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dropsies.	Mania . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Anasarca . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rheumatic Affections.	Hydrothorax . . .	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..
	Rheumatismus . . .	..	..	..	..	2	..	2	..	..	..	2	..	2	..	4	..
	Odontalgia . . .	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
Venereal Affections.	Podagra . . .	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..
	Syphilis . . .	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..
	Bubo Simplex . . .	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..
Abscesses and Ulcers.	Gonorrhœa . . .	..	..	..	..	3	..	2	..	..	..	1	..	1	..	..	..
	Hernia Humoralis . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
	Phlegmon et Abscess. .	..	..	..	..	1	..	..	..	..	..	..	..	1	..	2	..
Wounds, and Injuries.	Ulcer . . .	..	..	..	..	1	..	..	..	..	..	2	..	1	..	..	..
	Subluxatio . . .	..	..	..	..	..	..	..	..	2	..	..	..	..	..	1	..
	Vulnus Incisum . . .	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
	,, Sclopitorum . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diseases of the Eyes.	Contusio . . .	1	..	1	..	..	..	..	..	1	..	2	..	1	..	1	..
	Fractura . . .	1	..	..	..	..	..	..	..	..	..	..	..	1	..	2	..
	Morbi Oculorum . . .	1	..	..	..	2	..	1	..	3	..	..	..	..	..	..	..
All other Diseases.	Cynanche Tonsil. . .	..	..	..	..	..	..	3	..	..	..	2	..	..	..	1	..
	Otitis . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
	Erysipelas . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
	Epistaxis . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Hæmorrhoids . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Atrophia . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Annual Totals .		113	30	43	4	74	8	88	13	77	7	41	5	88	29	39	1

In 1819 the Admissio



LXII. OF APPENDIX.

of JAMAICA, from 1819 to 1836 inclusive.—Extracted from the Medical Annual Returns.

327	1828		1829		1830		1831		1832		1833		1834		1835		1836		From 1819 to 1836			
	101		101		121		98		77		126		164		160		160		Aggregate Strength 1966			
	Died.	Trtd.	Died.	Trtd.	Died.	Trtd.	Died.	Trtd.	Died.	Trtd.	Died.	Trtd.	Died.	Trtd.	Died.	Trtd.	Died.	Trtd.	Died.	Treated.		Died.
By each Disease.																				By each Class of Diseases.	By each Disease.	By each Class of Diseases.
96	17	3	24	3	32	4	43	8	12	1	35	2	28	3	45	5	36	2	53	760	136	136
..	..	..	..	..	..	..	..	..	2	..	4	..	4	..	2	..	..	..	12	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..
..	..	..	..	..	4	..	5	..	..	..	..	..	..	..	..	..	3	..	15	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..
..	1	1	1	1	..	..	..	..	..	..	..	..	1	1	..	..	..	..	6	69	4	4
..	..	..	..	..	..	..	..	..	2	..	2	..	7	..	3	..	8	..	43	..	..	..
..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	3	..	..	..
1	1	..	1	..	3	1	..	..	1	..	..	..	3	..	6	..	6	..	35	35	2	2
..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	1	1	5	..	3	..
..	..	..	7	..	6	..	5	1	..	..	6	..	..	..	2	..	..	..	64	..	1	..
..	..	..	4	..	3	..	2	..	1	..	..	..	..	..	4	..	..	..	13	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	16	152	3	7
1	..	..	..	..	..	..	2	..	1	..	5	..	6	..	1	..	4	1	46	..	..	..
..	..	..	1	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	3	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	..	..	..
..	2	1	..	..	..	..	..	..	..	..	..	..	1	1	..	..	1	1	6	10	6	7
..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	1	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
..	3	1	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	4	7	2	5
..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	3	..	3	..
..	4	..	..	..	2	..	..	..	3	..	6	..	1	..	4	..	..	..	38	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	41	..	..
..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..
..	..	..	..	..	4	..	2	..	..	..	1	..	1	..	..	..	..	..	13	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	33	..	..
..	..	..	2	..	..	..	..	..	3	..	3	..	1	..	..	..	..	..	13	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	..	..	..
..	..	..	..	..	..	3	..	2	..	2	..	2	..	3	..	5	..	5	28	67	..	..
..	..	..	..	..	4	..	3	..	4	..	8	..	2	..	6	..	4	..	39	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	..
..	..	..	..	..	..	..	..	..	3	..	2	..	..	..	..	..	..	..	6	38	1	2
..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
..	..	..	..	..	1	..	1	..	3	..	1	..	3	..	1	..	..	..	16	..	1	..
..	2	..	..	..	2	..	2	..	1	..	1	1	..	..	1	..	..	..	12	..	1	..
..	..	..	..	..	..	2	..	..	..	..	2	..	..	..	..	..	3	..	18	18	..	..
..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	8	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	2	22	..	1
..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..
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..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	..	..	..
19	32	7	45	5	67	5	76	9	46	1	83	3	77	6	85	6	81	6	1254	1254	164	164

are by no means complete.













